

*"Make Energy a Consideration in All We Do"*

# ENERGY

## express

The Air Force Facility Energy Center Newsletter

October/November 2010

## Think GREEN, Build GREEN, Fly BLUE

### **Air Force Civil Engineers Embrace Energy Awareness Month**

**Ms. Jennifer Elmore**  
HQ AFCEA/CEBH

October is a time to change the clocks, rake the leaves, and ring doorbells in search of sugary treats. It's also a time when every Airman, civilian, and contractor should "Think Green, Build Green, and Fly Blue," which is this year's Air Force facility energy awareness month theme. It challenges us to look for ways to conserve energy and be more efficient.

Since 2005, the Air Force has reduced its facility energy consumption by nearly 12 percent with more than 5 percent of its power now being generated from renewable energy sources. We're also increasing energy security by making bases more efficient, identifying alternative fuel sources for aircraft, and educating Airmen about the importance of efficient energy use.

The overall Air Force Energy Plan is made up of three goals or "pillars:" reduce demand, increase supply, and change the culture. In regards to facility energy, Maj Gen Timothy Byers, The Civil Engineer, says that to meet these goals, we should work towards "leaner installations, cleaner sources, and smarter decisions."



### **Leaner Installations**

The Air Force is improving building envelopes (walls, windows, floors and roofs), installing more efficient lights, and decentralizing heat plants. Energy consumption is down 38 percent at Minot Air Force Base, N.D., where engineers replaced an old central heat plant and distribution system with ground source heat pumps and high-efficiency boilers. The project also reduced water consumption by 13 percent. And Tyndall Air Force Base, Fla., has constructed a new state-of-the-art fitness center that will use 40 percent less energy than a typical building

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## **Energy Awareness Month Materials**

Energy Awareness Month guidance, logos, posters, and more are available on the CE portal (<https://cs.eis.af.mil/a7cportal>) and the AFCEA Energy CoP (<https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-EN-CE-A4>).

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its size. It's expected to become the first Department of Defense facility to reach the U.S. Green Building Council's Leadership in Energy and Environmental Design, or LEED, platinum level.



### Cleaner Sources

The Air Force has renewable energy projects (solar, wind, landfill gas, ground source heat pumps) in operation on 45 bases. Engineers at the Air Force Facility Energy Center, located at the Air Force Civil Engineer Support Agency, Tyndall AFB, expect the number of projects to double by 2015. AFFEC engineers also anticipate expanding into the biomass arena. Two wood waste plants, each with capacities of 15 to 25 megawatts, are being considered for Eglin Air Force Base, Fla., and Robins Air Force Base, Ga.



### Smarter Decisions

It's estimated that 30 percent of energy conservation can be derived by simply changing the culture. It starts with education. The Air Force Academy's Falcon Green program, for example, brings energy into the curriculum, ensuring that all future Air Force leaders embrace energy awareness from the very beginning of their careers.

Culture change is also a priority for major commands and installations. Air Combat Command developed its own energy awareness program that includes an "Energy Proclamation" and encourages competition among squadrons for energy efficiency and conservation. ACC also developed the "Do One Thing" program, which challenges Airmen to make one significant change in their energy use. The energy manager for Air Force Special Operations Command distributed an "Energy Footprint" questionnaire to personnel to increase energy awareness and encourage everyone to reduce their energy footprint. At the installation level during Energy Awareness Month, Tyndall energy experts plan to hold an Energy Expo, publish energy articles in the base newspaper, send out energy-related emails, and host a day of educational displays at the base elementary school.

The Air Force has made progress in reducing facility energy usage, but needs everyone's help in meeting federal mandates. Do your part: Examine your facilities and surroundings and report energy-saving suggestions to your base energy manager.

## "Combined Assessments" Coming to a Base Near You

Mr. Mike Rits, P.E., CEM  
AFCESA/CENI



Here comes an energy audit team, then a team looking at space utilization. Oh yeah, we need to know the condition of the infrastructure, so that's another team of experts to escort throughout the base. We feel your pain. So starting in FY11, the Air Force Facility Energy Audit Program will combine with Facility Condition Assessments, Space Optimization Assessments, and High Performance Sustainable Building Evaluations to gain efficiency in data collection and help reduce the impact on base personnel and operations

The bases in line for combined assessments include Barksdale, Moody, Shaw, Beale, Creech, Davis-Monthan, Dyess, Holloman, Seymour Johnson, Langley, Ellsworth, Tinker, Arnold, Wright-Patterson, Patrick, New Boston, Clear, Los Angeles, Cavalier, Joint Base Fort Dix-Lakehurst, Joint Base Charleston Naval Weapons Center, Travis, Scott, Incirlik, Izmir, Lajes Field, Moron, RAF Fairford, Yokota, Misawa, ARWS (611th), Osan, Elmendorf, and Kunsan.

Contracts will continue to be managed and executed at AFCESA, with "jumpstart" funding from the energy conservation focus to reimburse for the non-energy portions of the combined assessments.

Additionally, the Facility Energy Center at AFCESA plans to forward fund the FY12 audits/combined assessments in the fourth quarter of FY11 to help identify more executable projects earlier and get ahead of the audit reporting requirements.

While this concentrated effort in FY11 will be more intensive than originally planned, it will eliminate double and triple assessments at the same facilities and provide a more comprehensive picture of where investments need to be made for the future. Questions regarding the combined assessments can be directed to Mr. Mike Rits, AFCESA/CENI at DSN 523-6230 or Mr. Steve Shoaf, AFCESA/CEOA at DSN 523-6470.

### Air Force Wins Three FEMP Awards

Congratulations to this year's winners of the Federal Energy and Water Management Awards. Approximately 94 nominations were received. A luncheon for the winners will be held on October 7th in Washinton, D.C.

- Minot AFB, ND, *Heat Plant Decentralization Project*
- Hickam AFB, Hawaii, *Hydrogen Refueling Station Solar PV Array*
- Kadena AB, Okinawa, Japan, *Installation of Water-Saving Devices*

## CE Portal: One-Stop Source for CE News and Info

If you've never logged on to the CE Portal...you are missing out. Or perhaps you've tried to get on, but you were unsuccessful and had technical difficulties? All the materials for Energy Awareness Month are posted as well as other great, informative materials. Here's how:

1. Go to <https://cs.eis.af.mil/a7cportal>.
2. Use your Common Access Card and be sure to select "DOD Email" certificate.
3. If you are denied access, email AF.EIM.Helpdesk@us.af.mil and explain what error you are receiving. "I receive an 'Error Code: 500 Internal Server Error' message when attempting to access https://cs.eis.af.mil/a7cportal."
4. You will get a response and they can fix it for you!

A7CIS will be hosting several DCO sessions to answer CE Portal related questions. The DCOs will provide a guided tour of the CE Portal. Attendees will learn what information is on the CE Portal, how to access the information, how to navigate the CE Portal, and how to trouble shoot technical issues.

To learn more, please attend and encourage your staff to attend one of the following scheduled DCOs.

- Thursday, 30 Sept, 1300 EDT  
DCO: <https://connect.dco.dod.mil/r68992762>  
Telecon: 1-866-285-7778, Code: 2752012.  
International: 214-622-4979, Code: 2752012.

- Tuesday, 12 Oct, 1500 EDT  
DCO: <https://connect.dco.dod.mil/r53551218>  
Telecon: 1-866-285-7778, Code: 2752012.  
International: 214-622-4979, Code: 2752012.

- Thursday, 14 Oct, 0800 EDT  
DCO: <https://connect.dco.dod.mil/r12775674>  
Telecon: 1-866-285-7778, Code: 2752012.  
International: 214-622-4979, Code: 2752012.

- Wednesday, 20 Oct, 0900 EDT  
DCO: <https://connect.dco.dod.mil/r50564720>  
Telecon: 1-866-285-7778, Code: 2752012.  
International: 214-622-4979, Code: 2752012.



The CE Portal is designed to support the CE Community by providing a central repository on CE initiatives. Civil engineers everywhere are encouraged to provide feedback and submit information, events, and announcements to: [AFA7C.StrategicComms@pentagon.af.mil](mailto:AFA7C.StrategicComms@pentagon.af.mil).

## Air Force Renewable Energy Industry Day

AFCESA is planning the first-ever Air Force Renewable Energy Industry Day. The location and details will be announced soon. The event will give AFCESA, AFCEE, AFRPA, AFRL, HQ and SAF the opportunity to reach out to renewable energy companies. Mr. Ken Gray, AFCESA's Energy Rates and Renewables Branch Chief, says, "We want industry leaders to know the Air Force is committed to the development and installation of renewable energy at our bases. We'll announce what projects we have in the works and how they can engage with us to bring them to fruition."

## UPDATE: FY11 Energy Capital Investments Program

- The April 1, 2010 ACES PM project pull identified not only projects for the FY11 program but also for the FY10 end-of-year investment of \$100M.
- There is now a shortfall in validated energy and water conservation projects for FY11.
- The energy auditors have been identifying potential projects that could be programmed early in October 2010.
- We plan to do another ACES project pull on Nov. 1, 2010.
- The validated projects identified from that pull will be used to fill the shortfall, provide a backfill list for FY11 program "breakage," and identify opportunities for early design of potential FY12 projects, ahead of the April 11 ACES pull.

If you have any questions or want to see what the report will look like (similar to the 1 Apr 10 report), you can contact Mr. Rick Stokes at comm. 850-283-6551, DSN 523-6551.

## MAJCOM Incentive Programs Encourage Energy Reduction

The Air Force uses incentives such as awards, recognition, and money to motivate individuals and installations to reduce facility energy consumption.

**AETC's** energy reduction incentive program includes three cash awards - \$1.5M, \$1M and \$500K. Award funds may be used for O&M projects at the wing commander's discretion; however energy-related projects are encouraged.

**ACC** provided \$1M to a Facility Energy Award Program in 2009. All ACC bases that exceeded the energy reduction goal received a fair share of the incentive money. Award funds may only be used on energy related projects. More than 30 were funded in 2009.

**ANG** started an incentive program in 2009 to identify and reward those installations that exceeded the 3% reduction goal for energy and 2% reduction for water conservation. Electrical intensity reduction between 3.01% and 6% earned \$30K, between 6.01% and 10% earned \$50K, greater than 10% earned \$75K. Water intensity reduction greater than 2% earned \$10K. Nearly \$3M in O&M dollars were distributed to 80 bases in 2010 for FY09 reductions.

**AMC** started a non-metric based award program in 2009 to reward individuals and groups who excel in promoting energy conservation and culture change at their bases. The "individual" category is based on initiatives and programs that encourage energy savings and culture change. The "group" category is based on programs such as vehicle fuels initiatives, cultural change initiatives, and pursuit of renewable energy technology and water conservation. Plaques are given to individual winners and group winners receive cash awards ranging from \$50K to \$100K.

**PACAF** allows its bases to keep unused utility funds if they meet energy intensity and water reduction goals. **AFSPC** does the same but requires bases to request to keep the utility funds and approves each on a case-by-case basis.

**AFMC** will roll out its incentives program in FY11. AFMC bases will be ranked using a combination of factors. The top three performing bases will be recognized and rewarded with project funding if and when available.

## FEMP Seminars Now Accessible

The Federal Energy Management Program's "First Thursday" 90-minute seminars are now archived on the FEMP website and available for instant viewing at <http://aaps1.eere.energy.gov/femp/training>. Since this is not live-streaming video like before, you should have no problem viewing it from any computer. A second series is slated to begin soon. For additional information on FEMP training, contact: Joe Konrade, 202-586-8039 or [joseph.konrade@ee.doe.gov](mailto:joseph.konrade@ee.doe.gov).

- Introduction to Executive Order 13514
- Energy 101
- Water Efficiency Planning and Implementation
- Federal Greenhouse Gas Accounting and Reporting
- Advanced Metering Requirements and Best Practices
- Operations, Maintenance, and Commissioning

FEMP FIRST THURSDAY  
SEMIN@R



**Air Force Facility Energy Center Help Desk**  
(850) 283-6236 DSN (523)  
[AFCESAenergy.helpdesk@tyndall.af.mil](mailto:AFCESAenergy.helpdesk@tyndall.af.mil)

**AFCESA Commander**  
Col David L. Reynolds

**AFFEC Director**  
Mr. Rick Stacey

**Communications Coordinator**  
Ms. Jennifer Elmore

**Graphic Designer**  
Mr. Michael Hopper



*The Energy Express is a publication of the Air Force Facility Energy Center, AFCESA, Tyndall AFB, Fla. Please send your comments, story ideas, and photos to [jennifer.elmore.ctr@tyndall.af.mil](mailto:jennifer.elmore.ctr@tyndall.af.mil), DSN 523-6476.*