



GovEnergy
www.govenergy.gov

The Premier Energy Training Workshop
and Trade Show for Federal Agencies

A River of Energy Solutions

WHAT'S IN IT FOR ME?

Changing Fed. Employee Behavior

Don Rainey, Resource Efficiency Manager, Kirtland AFB, NM

IT'S ALL ABOUT OUR BEHAVIOR



CULTURE

the beliefs, customs, practices, and social behavior of a particular nation or people

Less than half of the US believes in human caused global warming of a problematic magnitude.

Behavior

the things that people DO

Energy Awareness \neq Behavior Change

Inertia prevails – frog stays in the cook pot.

Are we capable of preemptive behavior?

What Do We Do NOW

- EFFICIENT USE OF RESOURCES is our best immediate mitigation of fossil fuel problems.
 - The average built structure can operate 40% more efficiently through cost effective improvements.
 - Over 10% savings can come quickly with little or no cost – just by changing our behaviors.

NO DOWNSIDE FOR THE GENERAL PUBLIC

IT'S JUST GOOD BUSINESS

THE ALMOST FREE 10%+

- Our community can change their behavior and reduce consumption at least 10% at work AND even more away from work.
- Our Base Energy Manager is well regarded in the community but is unable to document behaviorally generated savings.
- You may not feel able to harvest these savings yourself but you may find champions who are gifted people motivators.

CULTURAL CHANGE COMES FROM NEW COMMUNITY BEHAVIORS

- Some people like some change.
- Some people love change and a few are willing to be CHAMPIONS.
- ALLOW CHAMPIONS TO MAKE CHANGES.
- Recognition is a great reward!

NURTURING CHAMPIONS on BASE

- Offer opportunities to champions.
- Publish KUDOs and success stories.
- Provide interactive communications pathway.
- Respond to special interests of community.
 - Better to DO imperfect than NOT DO perfect.
 - First task is to overcome inertia.

Facility Managers

- Facility Manager Training
 - Explain why new behaviors save energy.
 - Provide prescriptive direction for doing something better this quarter.
 - Follow-up on progress & solve problems.
- Some FMs will self identify themselves as CHAMPIONS so give them something to do.
- KAFB Energy Manager and Team is now planning a Web Based Training program.

BASE COMPETITIONS

- The Air Force likes competitions between buildings and organizations to improve efficiency.
- Provide on-site coaching, offer open meetings for interested parties to discuss behavioral improvements and building problems.
- Identify and encourage local champions.

EXAMPLES OF CHANGE

NURTURE CHAMPIONS AND WATCH THE CHANGE SPREAD

- O&M staff had a BAD project. Spirits were down and administration did not trust O&M.
 - Mike’s 3-way valve replacement leads to new confidence and “In-House” Chiller Upgrade.
 - Successful project leads to remaking of O&M management, confidence, behavior and culture .
- Medical staff now contribute ideas... which get implemented!
- Less “Churn”!

In House Project – Mostly Regular Time



WHY DID TMC CHANGE BEHAVIOR?

WHATCH THE CHANGE SPREAD

- O&M nightshift can be boring but manager did NOT want proactive work – only reactive work.
 - Larry identified solutions to long term problems but was chastised by manager.
 - We “allowed” Larry to do good deeds and documented the value of his work.
 - The night crew now does proactive work.
- Day crews followed suite. O&M saved 6.7% energy in the first year of new behaviors. That’s >10% efficiency improvement.

Documented 6.7% Behavioral Savings



WHY DID Operation & Maintenance STAFF CHANGE BEHAVIOR?

WHATCH THE CHANGE SPREAD

- Architect was loosing job. Facility Director saw people abilities in Keith and got the electric utility to help fund a Resource Conservation Manager position. This was the most energy efficient Medical Center so Keith focused on Behaviors.
- Culture changed. PMC provides excellent care and makes 5% profit. Average profit is 3%.
- Benefits have impressed healthcare community.

KEITH IS NOW A CELEBRITY



Keith
Sustainability Coordinator,

WHY DOES PMC CONSTANTLY IMPROVE BEHAVIOR?

Mock Billing

- The Base Energy Team knew what they wanted the mock billing to look like but no one knew how to do it...
- Our utilities guy (a sleeper) figured it out the next night on his own time and brought it to the energy team the following day.
- His mock billing style is being incorporated into the reimbursable billings.

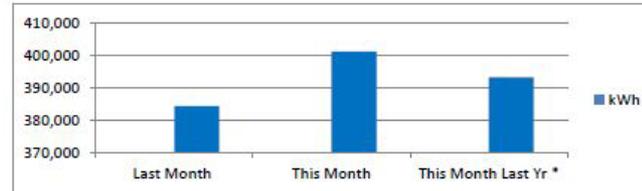
Mock Billing

377TH CIVIL ENGINEER DIVISION

Mock Energy Bill
February 2011

The following table shows your organizations electricity consumption:

	Electrical kWh	Cost	Density kWh/SF	% Energy Reduction*
Last Month	384347.2	\$ 29,460.21	0.5665	2.0%
This Month	401213.4	\$ 32,534.39	0.5914	
This Month Last Yr *	393190.0	\$ 31,883.42	0.5796	



* This data will not be available until January 2012

The following table shows your organizations natural gas consumption:

	Gas Kcf	Cost	Density Kcf/SF	% Energy Reduction*
Last Month	1937.1	\$ 7,672.29	0.0029	-5.0%
This Month	1141.7	\$ 4,702.93	0.0017	
This Month Last Yr *	1201.2	\$ 4,922.16	0.0018	



* This data will not be available until January 2012

Why did the “ Sleeper ”
become a Champion?

MORE CHANGE MOTIVATIONS

- Lori was tasked with creating Environmental Management Services (EMS) program but there was little cooperation.
 - Top brass finally provided support.
 - They educated base personnel and service providers. Some were tasked with insuring compliance.
 - Keep educating and enforcing until compliance is second nature.

TOP BRASS SUPPORT

- **Team Building**
- Creating EMS relationships

- **Marketing Techniques**
 - Selling the EMS program to Stakeholders

- **Integration Tools**
 - Educate / Communicate EMS on a daily basis

- **Building towards sustainability**
 - new brass continues support



**TOP BRASS, FORCE OF LAW AND
REPETITION MADE THIS BASE
CHANGE**

**CAN WE ADAPT THIS PATTERN TO
RESOURCE EFFICIENCY?**

IN CONCLUSION

- How to get others to do the work
 - Tell them your mission
 - Ask questions – let them provide solutions
 - Provide Training and technical support
 - Keep the monkey on their back
 - A “sleeper” may take the reins
 - Congratulations, you’ve just ACTIVATED a Champion
 - Publicize success, acknowledge contributors

DIFFERENT APPROACHES

- Mike had strong TOP leadership but a stubborn director. Director changed his behavior and beliefs. Culture has changed!
- Larry had weak leadership and bad management. We made improvements in spite of management. Administrator fears backslide.
- Keith's organization sought out improvements. Profits are 67% above average.
- Lori had Force of Law and top brass support. Program was a success!

BE AN OPPORTUNIST

- Dovetail efforts with other activities.
- Champion may have different priorities than you. You may sway their priorities but, within reason, support them in achieving their goals.
- Some people will NOT cooperate. Avoid them. Life is too short and there are many easier opportunities to pursue.

TAKE AWAY

- EMPOWER PEOPLE – GIVE THEM PERMISSION
- GET TO KNOW AND APPRECIATE YOUR PARTNERS
- HAVE CLEAR ACHIEVABLE AND PROGRESSIVE GOALS

QUESTIONS?

Thanks for Participating!

Don Rainey, CEM, Sain Engineering Associates
Resource Efficiency Manager, Kirtland AFB, NM

donald.rainey.ctr@kirtland.af.mil

don@donrainey.com

505-846-5845

206-618-2750 Cell



NO EXIT