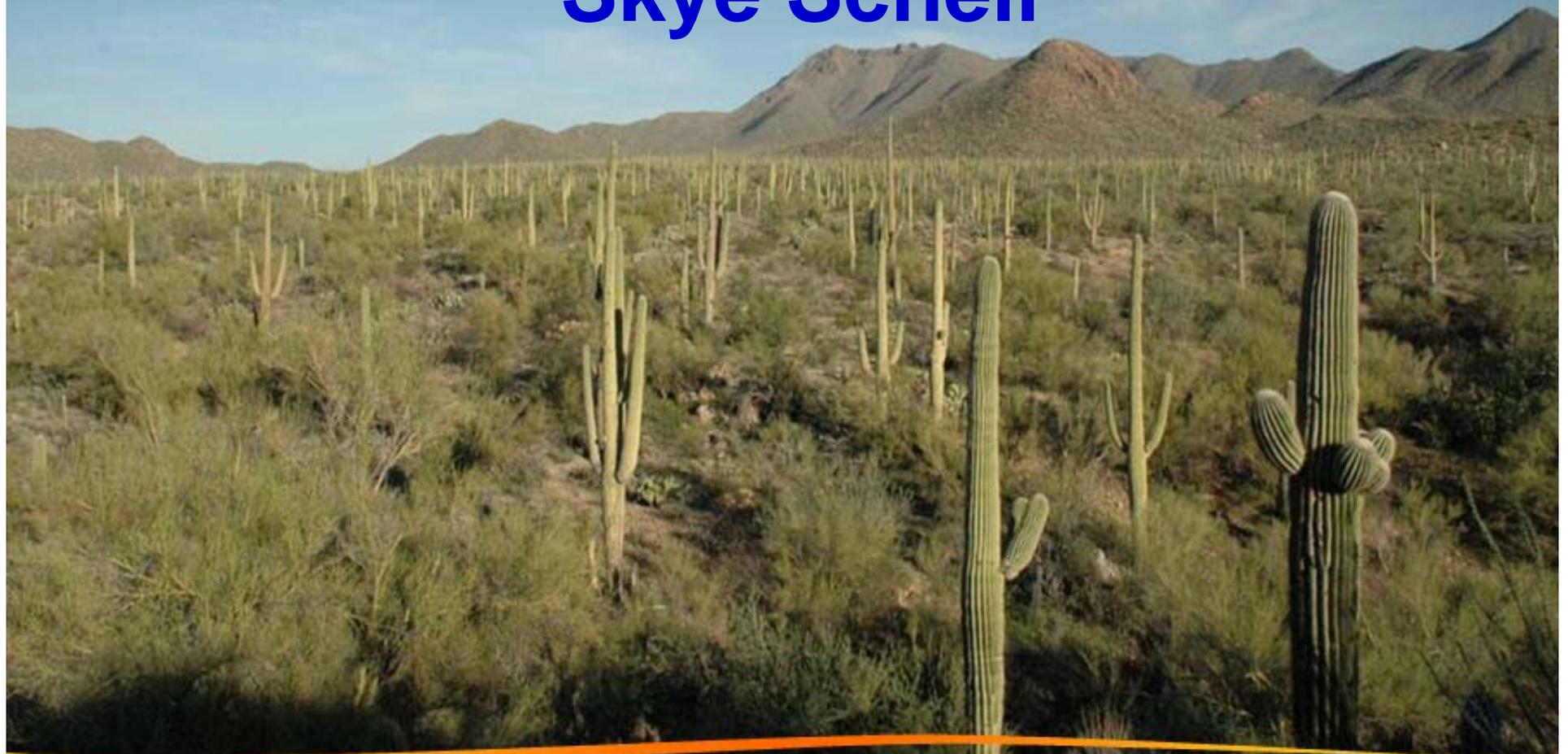


DOE TEAM INITIATIVE

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Phoenix, AZ

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An Argument for *Transformation*

- DOE has typically been in the top three most energy intensive Federal agencies over the past few years
- In FY06
 - DOE spent only a fraction of direct funding for energy efficiency projects compared to other major agencies per square foot
 - DOE only issued 2 ESPC delivery orders, whereas DOD and USPS together issued 36
 - DOE had no centralized program to improve its own energy management

As a consumer of over 21,000 billion BTU/yr and almost 5,000 GWh/yr, DOE must demonstrate energy management leadership in the Federal government

Background



- *The Transformational Energy Action Management (TEAM) Initiative*
 - TEAM is designed not just to meet Federal energy management mandates, but to **exceed** them and **lead** the Federal government
 - Developed as an Agency-wide, coordinated approach to improve energy management
 - Designed to include all major DOE sites
 - High level involvement from all DOE management

Background



“It is my intent that the TEAM Initiative ensures that the Department:

- **Becomes the first agency to meet all environmental, energy and transportation goals and requirements of EO13423;**
- **Exceeds the Executive Order goals in several key areas including reduced energy intensity and greenhouse gas emissions, building efficiency, clean energy production and use, and fleet management; and**
- **Leads all major Federal agencies in overall environmental, energy, and transportation management.”**

**Samuel W. Bodman,
Secretary of Energy**

TEAM Goals



Through the TEAM Initiative, DOE's goal is to:

- **Reduce** energy intensity by over 30% & water intensity by over 16% in all DOE facilities before 2015
- **Acquire** at least 7.5% of all energy from renewable sources
- **Attain** LEED Gold Standard on all new buildings & on all buildings undergoing major renovations
- **Meet** Five Guiding Principles of High Performance Sustainable Buildings for 15% of all current buildings by the end of FY 2015
- **Increase** use of alternative fuels by 10% annually and decrease petroleum consumption by 2% annually

*TEAM is designed to **meet, exceed and lead** Federal mandates found in EPACT 2005, EISA 2007 and EO13423*

The TEAM Process



Documenting requirements

- Federal Mandates
 - Energy Policy Act of 2005 (EPACT)
 - Energy Independence and Security Act of 2007 (EISA)
 - Executive Order 13423 (EO13423)
- DOE Order 430.2B
 - Encapsulates, codifies and expands upon Federal mandates
 - Includes a Contractor Requirements Document that ties the performance of contractors who operate DOE facilities to energy management goals

The TEAM Process



A coordinated approach

- High level focus from all of DOE
 - Executive Steering Committee consisting of most Undersecretaries, Assistant Secretary Karsner, as well as the Deputy Secretary began to institute TEAM
 - Throughout the Initiative, the Deputy Secretary and Secretary of Energy are frequently briefed
 - Open lines of communication are maintained with all major DOE programs, including National Nuclear Security Administration, Office of Environmental Management, and Office of Science, as well as their respective facilities

The TEAM Process



An ordered approach

- Order of Operations
 - Private party financing is the primary vehicle to achieve TEAM goals
 - Energy savings performance contracts
 - Utility energy savings contracts
 - Power purchase agreements
 - When private party financing cannot be leveraged, direct appropriations are justified

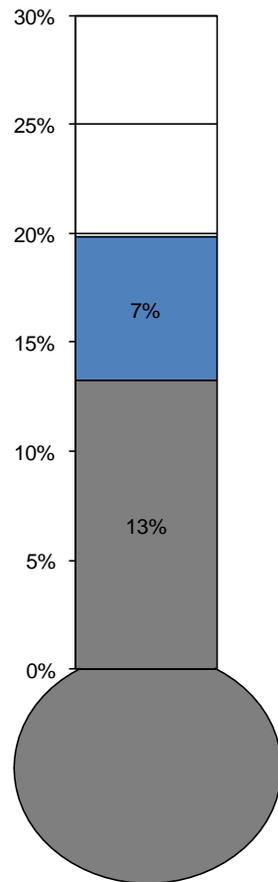
TEAM Status to Date



A record DOE ESPC pipeline

- Over \$400M in project investment is in the works to be awarded
 - Four projects have recently been awarded
 - Oak Ridge National Laboratory (\$89M)
 - Idaho National Laboratory (\$33M)
 - Lawrence Livermore National Laboratory (\$11M)
 - National Energy Technology Laboratory (\$6M)
 - 16 more projects are due by the end of the year and beginning of next year
- Projects in the works include:
 - A 19-MW biomass cogeneration plant at Savannah River Plant
 - A 100-MW concentrated solar plant at Nevada Test Site
- Over 40+ comprehensive site evaluations conducted
- Sites with the three major DOE fleets will be outfitted with alternative fuel stations

TEAM Status to Date



TEAM Energy Intensity Reduction Progress

Goal: 30% energy intensity reduction by 2015 from 2003 baseline

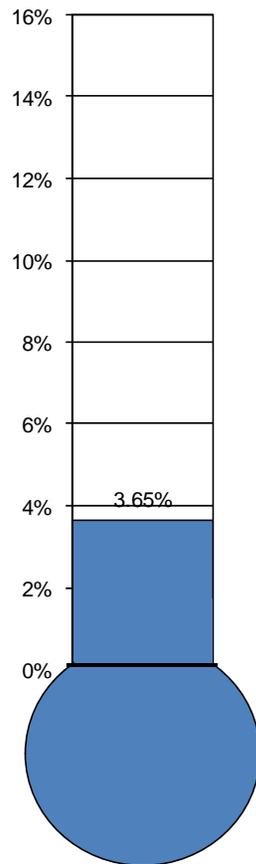
TEAM estimates and 2003-2007 energy savings of all sites as of 07/31/08

20 Initial Proposals and 5 Detailed Energy Surveys received

■ TEAM Contribution
■ existing (2003-2007)

In the span of 1 year, TEAM has proposed energy savings that is more than half of what it took 4 years to accomplish

TEAM Status to Date



TEAM Water Intensity Reduction Progress

Goal: 16% water consumption reduction by 2015, from 2007 baseline

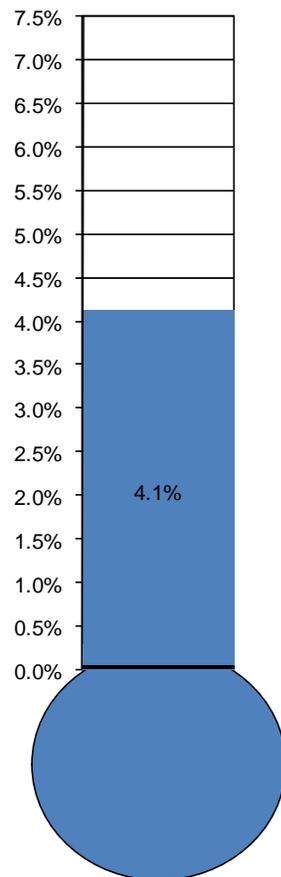
TEAM Estimates as of 07/31/08

20 Initial Proposals and 5 DES received

Future water projects with significant potential:

- INL Phase 2 ESPC
- LANL Water Reclamation
- LLNL Phase 2 ESPC
- TJNAF graywater recycling
- BNL
- SRS

TEAM Status to Date



TEAM Renewable Energy Use Progress

Goal: 7.5% on-site renewable energy generation

TEAM Estimates as of 07/09/08

20 Initial Proposals and 5 Detailed Energy Surveys received

Continuing Progress



DOE Order 430.2B Executable Plans

- **DOE Sites are required to submit Executable Plans that specify how they will reach TEAM goals**
 - List energy conservation measures in ESPC contracts as well as those to be funded directly
 - Updated every year
- Guidance issued two months ago

Franchising TEAM

- DOE is working with State Department on a joint MOU to franchise the TEAM process to their facilities
- FEMP's new Program Manager invites government agencies to sit down and discuss with him their needs and requirements

FEMP Support



FEMP helps other agencies by:

- **Sharing** successful best practices
- **Providing** technical assistance
- **Assigning** Federal Finance Specialists & Project Facilitators
- **Tracking** progress & total project investment levels
- **Providing** energy performance contracting training
- **Providing** management and policy support as needed



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