#### DOE TEAM INITIATIVE

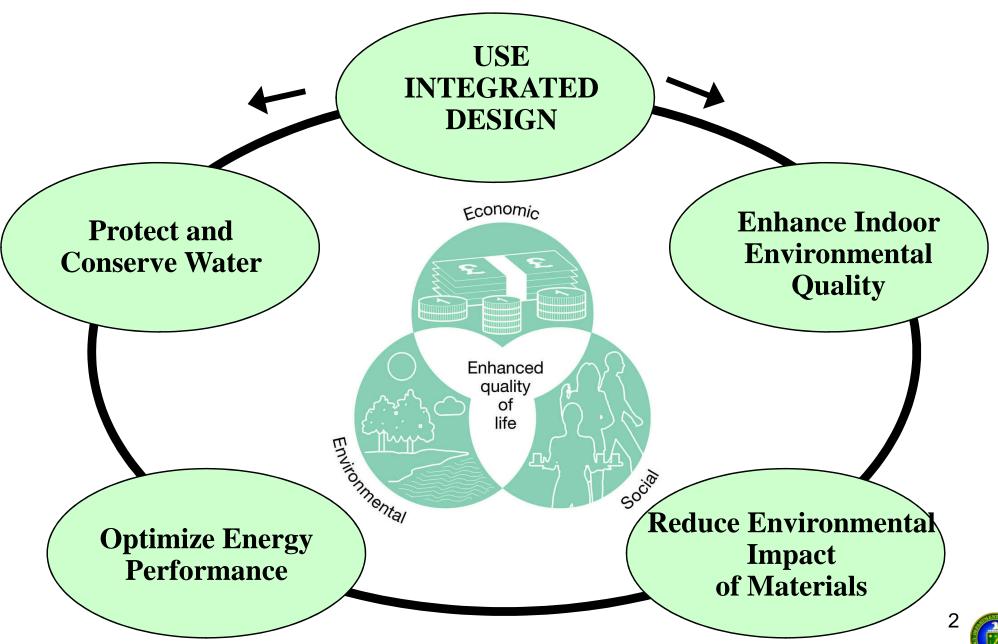


National Renewable Energy Laboratory
Science and Technology Facility – LEED Platinum

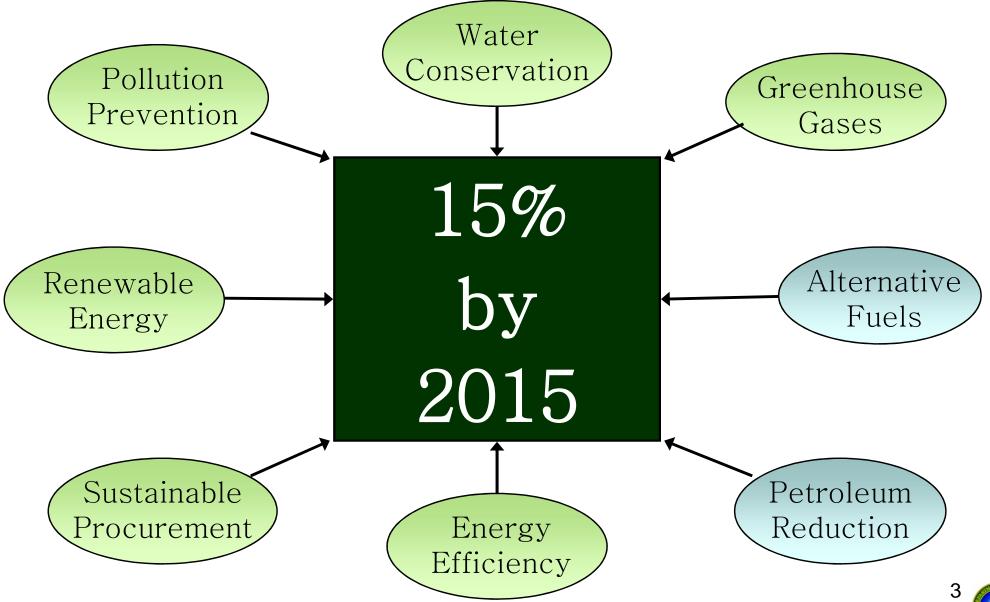
# High Performance Sustainable Buildings

October 14, 2008

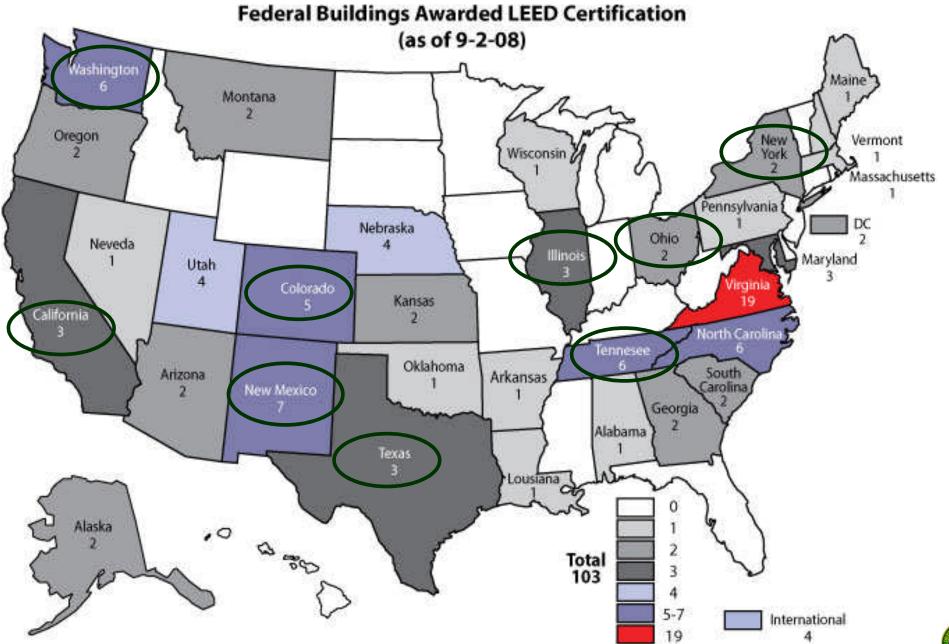
## **Sustainable MOU Guiding Principles**



## Sustainable Building: The Umbrella of EO 13423 and TEAM



## 104 Federal LEED Buildings... 18 are DOE





### Federal Leadership on New Construction / Leases

#### 18 DOE LEED® Certified Buildings

- 2<sup>nd</sup> most in Federal Govt behind DOD with 20
- Equals 1.82 million square feet, or likely about 2% of non-excluded inventory, depending on final interagency guidance (goal is 15% by 2015)
- Two LEED® Platinum buildings: NREL S&TF, Fernald Visitor Center
- 20 more buildings LEED registered\*, equaling 1.83 million square feet

#### Institutionalizing Sustainability into DOE policy

- February 2008 S-1 Memo mandates LEED Gold requirement for all buildings >\$5M (leading policy in Federal Govt)
- EO 13423 and S-1 memo requirements incorporated into DOE Order 430.2B, Departmental Energy, Renewable Energy, and Transportation Management
- Sustainable Building Guides for DOE Orders on real property asset management and environmental management systems
- Expanded Project Assessment Reporting System (PARS) to incorporate sustainability data fields
- Incorporating LEED® into new lease requirements



<sup>\*</sup> LEED® certified buildings have received third-party verification and received a plaque; LEED® registration is only the first step toward certification.

## Federal Leadership on Existing Buildings

- DOE Existing Building Assessment Tool
  - Assesses each site's current building portfolio for meeting sustainability Guiding Principles
  - Beta test finished at 8 DOE sites, and rolled out to all sites
  - Each site developing plan to get to 15 percent
  - Made available to all of Federal government
- Incorporated sustainability elements into the DOE Facility Information Management System (FIMS), which tracks DOE's real property assets

## **Priorities for Getting to Green**

- Revise assessment tool when final guidance issued
- Finalize green leasing policies
- Training and Outreach
  - Sustainable building workshops at DOE sites
  - DOE TEAM sustainable building website
- Tracking and Reporting
  - At Headquarters:
    - DOE Site Executable Plans and Ten-Year Site Plans
    - New Construction PARS
    - Existing Buildings FIMS
  - At DOE Sites:
    - Environmental Scorecard
    - Sustainable Building Implementation Plan

#### DOE LEED® CERTIFIED PROJECTS

DOE Site	Project Name	Project Type	Gross Square	Certification	Certification
502 Onc			Feet	Date	Continuation
National Renewable	Science And Technology	Laboratory	64,000	3/13/2007	Platinum
Energy Lab	Facility				
Fernald	Fernald Preserve Visitor Center	Multi-Use	11,000	9/20/2008	Platinum
Oak Ridge National Lab	Multiprogram Research Facility (leased)	Campus	218,279	3/29/2007	Gold
Lawrence Berkeley National Lab	Molecular Foundry	Laboratory	96,000	10/4/2007	Gold
Argonne National Lab	Central Supply Facility	Industrial	53,000	11/21/2002	Silver
Bonneville Power Administration	Ampere Annex	Multi-Use	3,000	4/2/2004	Silver
Oak Ridge National Lab	Joint Institute For Computational Sciences	Assembly	60,044	5/27/2005	Silver
Sandia National Lab	Joint Computational Engineering Lab	Multi-Use	66,140	11/20/2006	Silver
Brookhaven National Lab	Research Support Building - Phase 1	Other	65,000	1/2/2008	Silver
Sandia National Lab	Mesa Microsystems Lab	Other	130,000	4/16/2008	Silver
Sandia National Lab	Mesa Microsystems WIF		162,747	5/21/2008	Silver
Brookhaven National Lab	Center For Functional Nanomaterials	Laboratory	94,100	5/27/2008	Silver
Oak Ridge National Lab	East Campus Modernization (leased)	Commercial Office	376,000	4/8/2004	Certified
Oak Ridge National Lab	Research Support Center	Multi-Use	53,000	11/10/2005	Certified
Pantex	Weapons Evaluation Test Laboratory	Laboratory	31,500	4/2/2007	Certified
Sandia National Lab	Mesa Microsystems Fabrication	Other	105,513	9/19/2007	Certified
Sandia National Lab	Center For Integrated Nanotechnolgies	Laboratory	90,400	10/10/2007	Certified
Y-12	Bwxt Y-12 Site B: New Hope Center (leased)	Multi-Use	137,000	6/3/2008	Certified

#### DOE LEED® REGISTERED PROJECTS

DOE Site	Project Name	LEED	Project Type	Gross Square	Registration
		System	7.	Feet	Date
Oak Ridge National Lab	Modernization of Laboratory Facilities	LEED NC	Laboratory	160,000	6/18/2008
Princeton Plasma Physics Lab	Lyman Spitzer Building	LEED EB	Multi-Use	107,000	10/23/2007
Brookhaven National Lab	National Synchrotron Light Source	LEED NC	Laboratory	400,000	6/25/2007
Nevada Operations Office	Building B-3 Remediation & Upgrade	LEED NC	Commercial Office	77,500	4/30/2007
Pacific Northwest National Lab	Physical Sciences Facility	LEED NC	Multi-Use	206,000	1/22/2007
Sandia National Lab	Experimental Sciences Complex	LEED NC	Laboratory	40,000	11/6/2006
Idaho National Lab	Center For Advanced Energy Studies	LEED CS	Multi-Use	52,414	9/12/2006
Argonne National Lab	Electron Microscopy Center	LEED NC	Multi-Use	7,500	2/2/2006
Oak Ridge National Lab	Joint Institute For Neutron Sciences	LEED NC	Multi-Use	35,554	10/24/2005
Los Alamos National Lab	Center for Integrated Nanotechnolgies (CINT) Gateway Facility	LEED NC	Multi-Use	34,000	10/11/2005
Lawrence Livermore National Lab	LLNL - Terascale Simulation Facility	LEED NC	Multi-Use	253,000	7/27/2004
National Energy Technology Lab	NETL Day Care Center	LEED NC	Military Base	11,000	1/29/2004
Argonne National Lab	ANL - Center for Nanoscale Materials	LEED NC	Laboratory	90,000	11/20/2003
Sandia National Lab	Sandia Site Office LIGA Technologies Facility	LEED NC	Laboratory	29,200	11/14/2003
National Renewable Energy Lab	Thermal Test Facility	LEED EB	Multi-Use	10,000	11/13/2003
	NETL Technology Support Facility	LEED NC	Commercial Office	104,607	9/15/2003
Idaho National Lab	INEEL Subsurface Geosciences Laboratory	LEED NC	Multi-Use	200,000	10/29/2002
Pacific Northwest National Lab	Child Care Facility	LEED NC	Daycare	10,000	5/3/2001