



DoD's Strategic Sustainability Performance Plan:

Part of a Comprehensive Strategy to Address Mission Risks and Lower Costs

Shannon Cunniff

Director, Chemical & Material Risk Management Directorate

ODUSD (Installations & Environment)

Presentation at the E2S2 May 9, 2011

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 09 MAY 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE DoD's Strategic Sustainability Performance Plan: Part of a Comprehensive Strategy to Address Mission Risks and Lower Costs				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of the Deputy Under Secretary of Defense (Installations & Environment), Chemical & Material Risk Management Directorate, 3400 Defense Pentagon, Room 3B856A, Washington, DC, 20301-3400				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 9-12 May 2011 in New Orleans, LA.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 24	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Overview

Acquisition, Technology and Logistics

- ❖ Why Sustainability
- ❖ DoD's Sustainability Plan
- ❖ Considerations for Improving Your Sustainability



Global Context

Acquisition, Technology and Logistics



- ❖ Greater market competition
- ❖ Shrinking budgets
- ❖ Global supply chains
- ❖ Access to raw materials
- ❖ Disposal/recycling equities
- ❖ Energy supplies
- ❖ Water supplies
- ❖ Climate change



Sustainability Executive Orders

Acquisition, Technology and Logistics

- ❖ Executive Order 13514 represents a decisive move by the Obama Administration to instill sustainability into government operations



"As the largest consumer of energy in the U.S. economy, **the Federal government can and should lead by example** when it comes to **creating innovative ways** to reduce greenhouse gas emissions, increase energy efficiency, conserve water, reduce waste, and use environmentally - responsible products and technologies

Pres. Obama's Remarks on EO 13514, 5 October 2009



Sustainability Executive Orders

Acquisition, Technology and Logistics

❖ Agency Requirements:

- Establish Sr. Sustainability Official
- Establish GHG emission reduction targets
- Prepare a Strategic Sustainability Performance Plan
- Annual Reports & OMB review

❖ Why this one is different!





What is Sustainability to DoD?

Acquisition, Technology and Logistics

- ❖ The ability to operate into the future without decline – either in the *mission* or in the natural and manufactured systems that support it.





Why Address Energy? Mission Security!

Acquisition, Technology and Logistics

❖ Energy Security

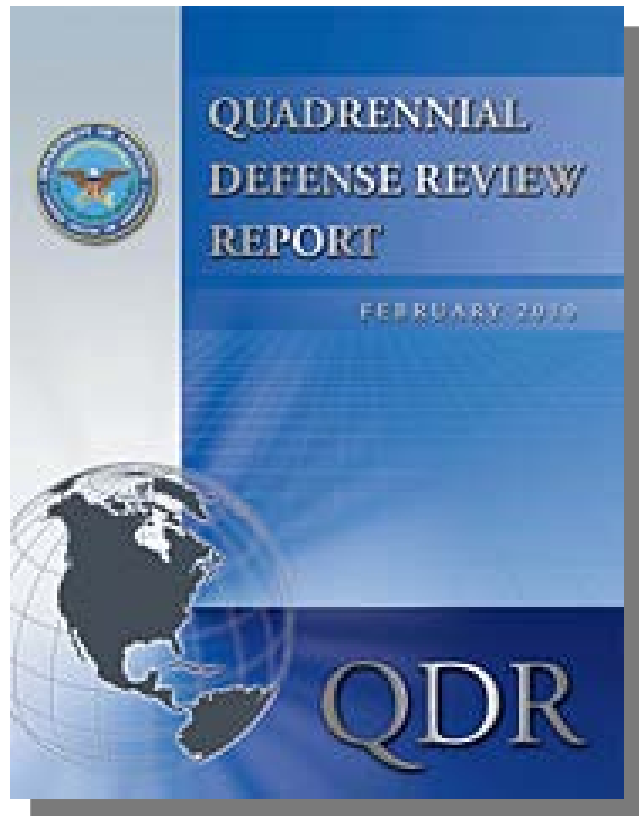
- Growing risk to operating forces
- Insecurity of the global commons
- Grid vulnerability
- Protect DoD from energy price fluctuations





Climate Change and DoD

Acquisition, Technology and Logistics



- ❖ Reshaping the operating environment
- ❖ Potentially significant geopolitical impacts



Accelerant of Instability

❖ Disaster Assistance



❖ Food Security
❖ Water Supplies



DoD's Strategic Sustainability Performance Plan: Key Priorities

Acquisition, Technology and Logistics

Continued Availability of Resources
(energy & water issues)

Maintaining Readiness in the Face of Climate Change
(GHG emissions reduction and climate change adaptation)



Minimize Waste & Pollution
(chemicals & solid waste issues)

Mgm't Systems & Practices Built on Sustainability and Community



SSPP Objectives & Goals

Acquisition, Technology and Logistics



OBJECTIVE 1

Continued Availability of Critical Resources

- Goal 1 – Use of Fossil Fuels Reduced
- Goal 2 – Water Resources Management Improved



OBJECTIVE 2

Maintaining Readiness in the Face of Climate Change

- Goal 3 – Scope 1 & Scope 2 GHG Emissions Reduced 34% by 2020, relative to FY08
- Goal 4 – Scope 3 GHGs reduced 13.5% by 2020, relative to FY08



OBJECTIVE 3

Minimize Waste and Pollution

- Goal 5 – Solid Waste Minimized and Optimally Managed
- Goal 6 – Chemicals of Environmental Concern Minimized



OBJECTIVE 4

Management and Practices Built on Sustainability & Community

- Goal 7 – Sustainability Practices Become the Norm
- Goal 8 – Sustainability Built into DoD Management Systems



OBJECTIVE 1

Continued Availability of Critical Resources

Acquisition, Technology and Logistics

- *Energy Intensity by DoD Facilities Reduced by 30% of FY 2003 Levels by FY 2015 and 37.5% by FY 2020*
- *18.3% of Energy Consumed by DoD Facilities is Produced or Procured from Renewable Sources by 2020*
- *Use of Petroleum Products by Vehicle Fleets Reduced 30% by 2020 Relative to 2005*

Goal 1 - Use of Fossil Fuels Reduced



- *Potable Water Consumption Intensity by Facilities Reduced by 26% of FY 2007 Levels by FY 2020*
- *DoD Industrial and Irrigation Water Consumption Reduced by 20% of FY 2010 Levels by FY 2020*
- *All DoD Development and Redevelopment Projects of 5,000 Square Feet or Greater Maintain Pre-Development Hydrology to the Maximum Extent Technically Feasible*

Goal 2 – Water Resources Management Improved





GHGs 101

Acquisition, Technology and Logistics

Common Sources of Federal Greenhouse Gas Emissions



1

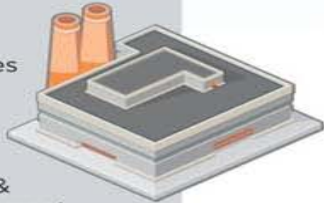
2

3

Vehicles and Equipment



Stationary Sources

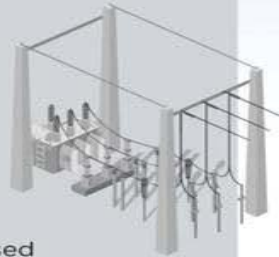


On-site Landfills & Wastewater Treatment

Fugitive Emissions

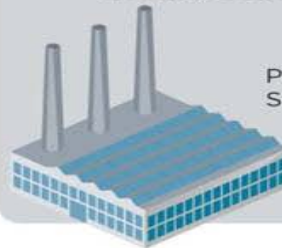


Purchased Electricity



Purchased Heating/Cooling

Purchased Steam



Transmission and Distribution Losses from Purchased Electricity

Business Travel



Employee Commuting



Contracted Solid Waste Disposal

Contracted Wastewater Treatment

Others*

SCOPE 1:

Greenhouse gas emissions from sources that are owned or controlled by a Federal agency.

SCOPE 2:

Greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.

SCOPE 3:

Greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities.



OBJECTIVE 2

DoD is a U.S. Government Leader in Reducing GHGs

Acquisition, Technology and Logistics

Goal 3 - Scope 1 & Scope 2 Greenhouse Gas Emissions Reduced 34% by 2020, Relative to FY08



- *Greenhouse Gas Emissions from Employee Air Travel Reduced 15% by FY 2020 Relative to FY 2011*
- *30% of Eligible Employees Teleworking at Least Once a Week, on a Regular, Recurring Basis, by 2020*
- *50% of Non-Hazardous Solid Waste Diverted from Disposal in Landfills Not Owned by DoD by 2015 and Thereafter Through 2020*

Goal 4 - Scope 3 GHGs Reduced 13.5% by 2020, Relative to FY08





OBJECTIVE 3

Minimize Waste and Pollution

Acquisition, Technology and Logistics

- **All DoD Organizations Implementing Policies by FY 2014 to Reduce the Use of Printing Paper**

- **50% of Non-Hazardous Solid Waste Diverted from the Waste Stream by 2015 and Thereafter Through 2020**

- **60% of Construction and Demolition Debris Diverted from the Waste Stream by 2015, and Thereafter Through 2020**

- **Landfills Recovering Landfill Gas for Use by DoD: Two by FY 2012 and Ten by 2020**

Goal 5 – Solid Waste Minimized and Optimally Managed



- **15% Reduction of On-Site Releases and Off-Site Transfers of Toxic Chemicals by 2020, Relative to 2007**

- **100% of DoD Excess or Surplus Electronic Products Disposed of in Environmentally Sound Manner**

- **100% of DoD Personnel and Contractors that Apply Pesticides Properly Certified Through 2020**

Goal 6 – Chemicals of Environmental Concern Minimized





FY 10 Version of OBJECTIVE 4

Management and Practices Built on Sustainability & Community

Acquisition, Technology and Logistics

- **95% of Procurement Conducted Sustainably**
- **15% of Existing DoD Buildings Conform to the Guiding Principles on High Performance and Sustainable Buildings By FY 2015, Holding Through 2020**

- **All Environmental Management Systems Effectively Implemented and Maintained**
- **The Sustainability of Transportation and Energy Choices in Surrounding Areas Optimized by Coordinating with Related Regional and Local Planning**
- **All DoD Installations Have Integrated Pest Management Plans Prepared, Reviewed, and Updated Annually by Pest Management Professionals**

Goal 7 – Sustainability Practices Become the Norm



Goal 8 – Sustainability Built into DoD Management Systems





SSPP Reporting

Acquisition, Technology and Logistics

❖ SSPP reporting includes all Military Services and Defense Agencies

- ✓ Department of the Army
- ✓ Department of the Air Force
- ✓ Department of the Navy (includes Marine Corps)
- Defense Contract Management Agency (DCMA)
- Defense Commissary Agency (DeCA)
- Defense Finance and Accounting Service (DFAS)
- ✓ Defense Intelligence Agency (DIA)
- Defense Logistics Agency (DLA)
- ✓ Missile Defense Agency (MDA)
- National Geospatial-Intelligence Agency (NGA)
- National Security Agency (NSA)
- TRICARE Management Activity (TMA)
- Washington Headquarters Services (WHS)



✓ Agency has a submitted Implementation Plan (as of 4/22/11)



Reporting to OMB

Acquisition, Technology and Logistics

- ❖ Semi-annual reporting on goals
 - OMB Scorecards (January /June)
 - FY10 SSPP (approved by OMB 8/10)
 - FY11 SSPP (formal coordination occurring soon, due to OMB from OSD on 6/6/11)

- ❖ Progress reported on DoD-wide basis
 - Except energy reporting -- 3 Mil Depts broken out

- ❖ Using existing systems for data collection wherever possible



Scope 1&2 GHG Emission Reduction Target

Submitted comprehensive inventory as 2008 baseline for Scope 1&2 GHG Reduction Target of 34% by 2020 ¹



Scope 3 GHG Emission Reduction Target

Submitted comprehensive inventory as 2008 baseline for Scope 3 GHG Reduction Target of 13.5% by 2020 ¹



Reduction in Energy Intensity

Reduction in energy intensity in goal-subject facilities compared with 2003: 11.2% and not on track



Use of Renewable Energy

Use of renewable energy as a percent of facility electricity use: 11.3% from any renewable source (including thermal)



Reduction in Potable Water Intensity

Reduction in potable water intensity compared with 2007: 12.9% and on track for 26% in 2020



Reduction in Fleet Petroleum Use

Reduction in fleet petroleum use compared to 2005: 6.6% and not on track



Green Buildings

Sustainable green buildings:
0.06% of buildings sustainable
0.46% GSF of inventory sustainable





FY 2011 SSPP

Covers FY 10 Progress

Acquisition, Technology and Logistics

- ❖ Due June 6
- ❖ OMB Reviews
- ❖ Final Released (Aug – Sept??)
 - Will be first report on progress on all metrics
 - Will include OMB Scorecard on progress
 - Will include DoD climate change adaptation policy



SSPP Governance Structure

Acquisition, Technology and Logistics



Non-tactical
Fleet

Facilities
Infrastructure

DoD
Energy

Green
Procurement

Chemical
Mgmt



Planning & Realizing Sustainability Gains

Acquisition, Technology and Logistics

- ❖ Actions that provide direct mission benefits
- ❖ High return on investment
 - Look for activities that contribute to more than one goal (energy, water, green procurement, recycling)
- ❖ Change behaviors
 - 100s of individual practices add up
 - Life cycle thinking in decision making
 - Purchase safer, greener products
- ❖ Seek gains in process efficiency
- ❖ Adopt - Adapt - Spread
 - Experts/Tiger teams
 - Make successes go viral.....





SUSTAINABILITY

- Sustainability Home
- EO 13423
- EO 13514
- DoD Policy
- DoD Plans and Guidance
- Federal Guidance
- Success Stories
- Related Links
- Contact Sustainability



FY2010 OMB Scorecard

FY2010 OMB Scorecard on Sustainability/Energy

FY2010 OMB Scorecard on Sustainability/Energy Narrative

Strategic Sustainability Performance Plan FY 2010

[Click to read the Department of Defense Strategic Performance Plan FY 2010 \(Aug.\)](#)

Success Stories



Message From The President

"As the largest consumer of energy in the U.S. economy, the Federal government can and should lead by example when it comes to creating innovative ways to reduce greenhouse gas emissions. Increase energy efficiency, conserve water, reduce waste, and use environmentally - responsible products and technologies. (Executive Order 13514) builds on the momentum of the Recovery Act to help create a clean energy economy and demonstrates the Federal government's commitment, over and above what is already being done, to reducing emissions and saving money."



Key Take Aways

Acquisition, Technology and Logistics

- ❖ Sustainability supports the mission
- ❖ Sustainability should lower costs
- ❖ Sustainability performance is measurable
 - Once measured, it can be managed

Contact: Dave Asiello, OUSD(I&E)

Sustainability Implementation Working Group

david.asiello@osd.mil