Washington Headquarters Services
Defense Facilities Directorate

“Meeting Executive Order 13514
Federal Leadership in Environmental, Energy, and Economic Performance”

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Meeting Executive Order (EO) 13514 Federal Leadership in Environmental, Energy, and Economic Performance

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Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 14-17 June 2010 in Denver, CO.
Meeting Executive Order (EO) 13514 – Federal Leadership in Environmental, Energy, and Economic Performance

Overview...

- Background of Washington Headquarters Service (WHS)

- Requirements of EO and the WHS Goals/Policies

- Progress and current status in meeting the EO
Washington Headquarters Services (WHS)

- WHS is a field activity of DoD
- WHS personnel contribute to the mission of our Defense customers by managing DoD-wide programs, operations for the Pentagon Reservation and DoD leased facilities in the National Capital Region
- WHS is organizationally aligned under the Director of Administration and Management (DA&M) for the Office of the Secretary of Defense (OSD)
- WHS provides consolidated administrative and operational support to several Defense Agencies, DoD Field Activities, the headquarters and various elements of the military departments
- WHS has approximately 1,200 civilian and military employees and 2,000 contract employees
The Pentagon – a building, institution, and symbol – is the headquarters of the United States Department of Defense (DoD) and the world's largest low-rise office building. It is a National Historic Landmark. It presently houses approximately 26,000 military and civilian employees and about 3,000 non-defense support personnel.

- 6.5M gross square feet of space
- 5-acre center court
- Footprint is large enough to accommodate 5 Capitol buildings

In spite of the Pentagon’s tremendous size, it takes only seven minutes to walk between any two points of the building because of its unique design.
The Pentagon...
- 7,754 windows
- 77,006 SF of restrooms
- 6,133,248 SF exterior grounds
- ~$1 million/per month in energy bills
- $18,000,000 annual budget for custodial contracts
- >$300,000 spent annually on recycled content products
What are WHS goals?

- Meet applicable Federal Mandates (i.e., Executive order 13514, EO 13423, EISA 2007, EPAct, etc).
- Continue sustainability integration into Design, Construction and O&M practices (use of LEED for benchmarking purposes and LEED Silver requirement).
- Institute policies to enhance the operation and ensure WHS compliance with environmental regulations, laws, and Executive Orders (EO) and LEED criteria.
Sustainability Program Purpose

- To integrate sustainability into all standard design, construction and operations at the Pentagon to achieve LEED certification(s) and be a central resource for information and status of green buildings within WHS.
  - Aid in the high performance operations and alterations of the building through education and technical support
  - Demonstrate cost savings by using ‘green’ integrated techniques and products
  - Incorporate ‘green’ language into all contracts and everyday procedures (SOPs)

Mr. Rhodes’ Commitment (signed 30 Apr 2007):

I am committed to maintaining a safe, healthy, and sustainable environment for WHS employees, customers, contractors, and the public. I am dedicated to making WHS a leader within the Department of Defense in safety and environmental management and will strive for continual improvement in these areas. To this end, I pledge to:

Seek innovative ways to prevent hazards and pollution, minimize energy use, conserve valuable resources, and reduce waste.
EO Requirements and WHS Goals/Policies

- Metro Entrance Facility (MEF) – received “Certified” LEED rating, 2003
- Pentagon Athletic Center (PAC) – received “Certified” LEED rating, 2004
- Remote Deliver Facility (RDF) – received “Certified” LEED rating, 2005
- Pentagon Library Conference Center (PLC2) – received “Silver” LEED rating, 2008
- Wedge 2 – received “Certified” LEED rating, 2007
- Wedge 3 – received “Certified” LEED rating, 2008
- Wedge 4 – received “Silver” LEED rating, 2010
- Wedge 5 – anticipate “Silver” LEED rating, 2011
Greenhouse Gas Emissions

- Requirement:
  - Reduce scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline
  - Reduce agency-wide scope 3 emissions by 2020, relative to a fiscal year 2008 baseline

WHS – GHG Goal

- Compliance with following federal mandates:
  - Reduce GHG emissions both short term and long term
  - Practice good environmental stewardship
**Activities & Inventory**

- GHG inventory is based on WHS only.

- GHG team is compiled based on subject matter experts for inventory data needed. Inventory reached across many departments/offices.

**GHG Team Members**

- Heating & Refrigeration Plan (HRP) Manager
- Incinerator Plan Manager
- Federal Office Building #2 (FOB2), Navy Annex Building Manager
- Engineering & Technical Services Division (ETSD)
- SEMB – Environmental Team
- SEMB – Office of the Pentagon Fire Marshal
- FEB – Energy Manager
- Pentagon Building Management Office (PBMO)
- Programs and Services Division
- Pentagon Force Protection Agency
- Acquisition and Personal Service Division
- Finance and Management Division
WHS Current Status in Meeting the EO

- **Initiative Purpose**
  - Compliance with following federal mandates:
    - EISA 2007
    - EO 13514 & 13423
    - DoD SSPP
  - Reduce GHG Emissions both short term and long term
  - Practice good environmental stewardship

- **Inventory Status**
  - Data 98% complete
  - Lacking data for employee travel – majority of emissions
  - Initial data calculations have been made to assess GHG for WHS
    - 236,700 metric tons CO2-eq
    - 11 metric tons CO2-eq per person
WHS Current Status in Meeting the EO

Next Steps...

- Evaluation of inventory for areas of improvement
- Develop report incorporating inventory, areas of improvement and next steps for implementing program
- Develop training for employees, tenants, etc
- Develop page for website dedicated to GHG program
WHS Goals in Energy Management

- Conduct gap analysis current Program
- Develop & implement Energy Management and Monitoring Program
  - Based on initiatives already in the queue, develop an overall program for energy efficiency reductions, best practices in O&M and high performance facility implementation
- Develop & implement metering and sub-metering program
  - Use current Measurement & Verification (M&V) data to provide way ahead for where more metering is needed
  - Establish SOP for review, management, and measurement
- Develop and implement an Energy Conservation Investment Program (ECIP)
  - Develop a short and long term plan for energy initiatives to meet EISA, EO, LEED requirements
  - Submit ECIP requests to maximize funding for energy efficiency initiatives
WHS Goals in Energy Management

- **Mission**
  - Develop a Safe and Secure place for employees to work and accomplish the mission of the Pentagon.
  - Obtain the goal and objectives

- **Objective**
  - Net Zero

- **Mission**
  - LEED EBOM
  - Energy Star Rating 75 or above
  - GHG Reduction
  - Liability and Reliability with Maintainability
Other WHS Goals & status...

- Recycling & Construction Waste Diversion
  - Current goal to meet 40% recycling
  - Continuous improvement - investigating other ways to increase recycling percentage (i.e., single source recycling)
  - Currently meeting 98% CW with renovation

- Chemical and materials reduction
  - Inventory conducted
  - Program plan developed
  - Currently implementation
Other WHS Goals & status…

- Use of environmentally friendly products/materials/services
  - Current janitorial services consist of environmentally friendly products and services (i.e., bamboo mops, bio-based cleaning supplies, chemical free, etc)
  - Implementing pilot for bio-based toner in copiers
  - Researching the use of ‘eco-friendly’ cafeteria products (i.e., utensils, plates, napkins)
In Conclusion...

- Continuing to develop & implement policy
- Continuous Improvement of programs
- Implementing reduction plan for GHG and carbon footprint
- Use of LEED for benchmarking sustainability
Thank you!

Any Questions or Comments?

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