



# **HOMELAND SECURITY ADVISORY COUNCIL**

Sustainability and Efficiency Task Force (SETF) Recommendations  
September 24-25, 2012

September 25, 2012



Judge William Webster  
Chairman, Homeland Security Advisory Council  
U.S. Department of Homeland Security  
Washington, DC 20528

Dear Judge Webster:

In December 2011, Secretary Napolitano directed the Homeland Security Advisory Council (HSAC) to re-activate the Sustainability and Efficiency Task Force (SETF) to assist the Department with an expert independent assessment of the current program and to make recommendations to enhance its effectiveness.

Specifically, the Secretary directed the SETF to respond to the following tasks focused on increasing DHS's sustainability and efficiency:

- 1) Evaluate the Strategic Sustainability Performance Plan from an industry viewpoint and how it aligns with the Secretary's Sustainability Policy memo, making suggestions on how the Department might improve its program policy, content and implementation; and to make suggestions on how to articulate sustainability costs/expenditures;
- 2) Assess the new Sustainability Data Acquisition program currently being undertaken by DHS's Management Directorate; comparing it with best practices and industry standards; and
- 3) Conduct an evaluation of the DHS vehicle fleet management program especially as it pertains to law enforcement vehicles.

Our response to the aforementioned tasks includes pragmatic, achievable recommendations that can strengthen the Department's mission, reduce operating costs, and enhance the overall security of the nation.

On behalf of the Sustainability and Efficiency Task Force, we appreciate the opportunity to advise you on these important topics regarding sustainability and efficiency. It has been an honor to serve you, the members of this Department, and the American people in this advisory role.

A handwritten signature in cursive script, appearing to read "Lydia Waters Thomas".

Lydia Waters Thomas  
Chair

A handwritten signature in cursive script, appearing to read "Gail Vittori".

Gail Vittori  
Vice Chair

# SECRETARY'S TASKING



- On December 27<sup>th</sup>, 2011 Secretary Napolitano directed the reactivation of the Sustainability and Efficiency Task Force (SETF).
- Based on the February 2010 report, the SETF was asked to:
  - Assess the updated 2011 SSPP from an industry viewpoint: Based on the prior SETF Recommendations, evaluate the current program and provide workable, constructive, and appropriate recommendations to further the program goals. This assessment is to include the new Sustainability Data Acquisition program currently being undertaken by DHS's Management Directorate, and an evaluation of the vehicle fleet management program, especially as it pertains to law enforcement vehicles.
  - Evaluate current DHS policy: Beyond the current program, review the Secretary's Sustainability Policy memo and evaluate how it aligns with the updated SSPP.

# FINDINGS AND RECOMMENDATION PROCESS



- The SETF met in-person on March 12, 2012 and July 16, 2012 in Washington, DC. Guest experts who joined us at these meetings and who contributed valuable information in the process of developing our recommendations included:
  - **Cynthia (“Cyndi”) Vallina**, Deputy Associate Administrator, office of Federal Procurement Policy, Office of Management and Budget.
  - **William S. Garvey**, Deputy Associate Director, White House Council on Environmental Quality.
  - **Dr. Christopher Pyke**, Vice President of Research, U.S. Green Building Council.
  - **Robert S. Martinez**, Executive Director, Support Services Bureau (SSB), New York City Police Department.
  - **Dr. Beth Stevens**, Senior Vice President Environmental Affairs, The Walt Disney Company.
  - **Tom Hicks**, Deputy Assistant Secretary for the U.S. Navy
  - **Karen Curran**, Federal Energy Management Program
  - **Michael Myers**, Myers Verde (sub-contractor to Sandia National Laboratories)
  - **Mike Wallace**, Director, Global Reporting Initiative’s Focal Point USA
  - **Kate Brandt**, Special Advisor for Energy, Office of the Secretary of the Navy

# FINDINGS AND RECOMMENDATION PROCESS (CON'T.)



- The Task Force's work was divided into three working groups:
  - Data Acquisition
  - Monetization
  - Vehicle Fleet Management
- Each working group met numerous times by telephone and/or video conference.
- DHS staffers participated in all meetings.



# **HOMELAND SECURITY ADVISORY COUNCIL**

**SETF 2010 Recommendations Status  
and  
Strategic Sustainability  
Performance Plan**

# SETF 2010 RECOMMENDATIONS STATUS AND



## THE 2011 STRATEGIC SUSTAINABILITY PERFORMANCE PLAN

- A summary of the acceptance and implementation of the recommendations made in 2010 is included as Appendix A. The Task Force was very pleased with the progress the Department has made towards implementing these recommendations.
- The Department's progress was further supported by the improvements shown in the 2011 Strategic Sustainability Performance Plan (SSPP).
- The Secretary's Sustainability Policy memo is instrumental in making sustainability and efficiency an integral part of the Department's mission as reflected in the SSPP.
- Numerous challenges remain. The following recommendations provide a path forward.



# **HOMELAND SECURITY ADVISORY COUNCIL RECOMMENDATIONS**



# **HOMELAND SECURITY ADVISORY COUNCIL**

**Data Acquisition  
Recommendations**

# BACKGROUND:



The Sustainability and Efficiency Task Force (SETF) was charged with responding to the following tasks associated with the Department's data acquisition capabilities:

- Review and assess current methods of acquiring data from DHS component organizations and suggest ways in which the Department can do so more accurately and efficiently.
- Review the current Data Warehouse contract and determine potential areas of improvement, given the Department's need for a data warehousing software package that accepts data from all of the components and uses a data dictionary to compile it in a manageable document.

# FINDINGS:



- There is an urgent need for a unified and transparent data acquisition, storage, and management system to measure the Department of Homeland Security's sustainability and resource-efficiency initiatives.
- The March 1, 2012 remarks of DHS Under Secretary for Management Rafael Borrás to the U.S. House of Representatives Committee on Homeland Security, Subcommittee on Oversight, Investigations, and Management, underscore this urgency: “. . .One of my top priorities. . .has been to improve the way we collect, store, and manage data across the Department in order to improve executive level decision making. . . While significant progress has been made to leverage business intelligence and integrate disparate processes and systems, we still have work to do in order to reach a fully integrated operational state.” This integration is an essential cornerstone of the Secretary's goal of One DHS.
- The Statement of Work for the ORACLE-based Data Warehouse describes a system that will integrate real property, personal property (mobile assets), and Sustainability Program data, anticipated to be operational by the end of FY 2011, along with the 50-75% completion of a Sustainability Program data dictionary. These efforts are behind schedule.

# FINDINGS (CON'T.)



- The Department is relatively new, comprised of multiple Components with pre-existing data acquisition systems.
- The Department has considerable security concerns. It is incumbent on the Department to execute a plan of action that pro-actively addresses these concerns and moves the data acquisition agenda forward in a timely fashion.
- Ensuring that the Components populate the data warehouse with reliable data in a consistent format that can be ‘rolled up’ into an aggregated, Department-wide performance profile is central to this effort.
- Other federal agencies and public and private best practice examples demonstrate that resources exist to provide technical support to establish a robust data acquisition, storage and management system, and accelerate the transition from designing to implementing said system.

# FINDINGS (CON'T.)



- Data reliability is an operational imperative:
  - It is critical to make informed decisions and to manage strategically, whether concerning the Department’s fleet, the design, construction and operations of its buildings, the supply chain, or the monetization of benefits.
  - It is necessary to meet the reporting requirements of Executive Order 13514 and the Office of Management and Budget’s annual Scorecard on Sustainability and Energy Performance.
  - It is essential to realize the Secretary’s aspiration for DHS to become the preeminent law enforcement department in terms of efficiency and sustainability.
- Real-time data on energy performance will improve the Department’s ability to promptly and effectively respond to emergencies, particularly those related to extreme weather and climate.
- Due to unreliable baseline data for the OMB Scorecard collected early in DHS’ history, it will take a number of years for this Scorecard to accurately reflect the Department’s efficiency and sustainability accomplishments. However, the Department should be able to account for its own progress in the short-term using an internally developed scorecard.

# **RECOMMENDATION #1:**



**Complete development of the data warehouse system by the end of FY '12, and activate its functional operations as a fundamental construct of a 'One DHS' unified data acquisition, storage, and management system that delivers reliable, verifiable data for each essential sustainability indicator associated with EO 13514 and OMB Scorecard reporting.**

- Ensure that the data warehouse has the capability to normalize and “roll-up” Component-generated data to create a ‘One DHS’ aggregated summary.
- Ensure completion of the Data Dictionary by 2<sup>nd</sup> Quarter FY 2013 with input from all Components; prioritize data fields associated with EO 13514 and OMB reporting requirements.
- Establish a formal policy that requires Components to provide data in a standard format that conforms to the broader DHS data acquisition conventions, and holds them accountable for this provision. To this end, the Secretary should make it mandatory for all DHS components to provide all sustainability-related data within 60 days of its request, and for such requests to come from Component heads.
- Pilot key elements of the data warehouse with Components to identify any barriers in order to facilitate solutions and speed implementation.
- Utilize the data warehouse as a resource for Department and government-wide sustainability and efficiency research.

# **RECOMMENDATION #2:**



**Affirmatively address security concerns and provide prudent measures to support proactive and effective data acquisition, storage, and management.**

- Recognizing the sensitivity and classified nature of some data, the Secretary should authorize an individual or group to address how to manage sensitive data and draw on experience of other federal agencies, such as the Navy, that have resolved concerns regarding management of classified information.

# **RECOMMENDATION #3:**



**The Secretary should direct the development of an internal DHS sustainability scorecard with standardized metrics by end of FY 2013, with the “initial” scorecard limiting its scope to readily available data sets which can expand over time.**

- This effort is vital to track progress and to catalyze appropriate corrective measures.
- A beta data collection method will include metrics addressing energy, water, waste associated with buildings, and fleet options, that are readily available today.
- Data points can populate a fact sheet to provide a periodic (e.g., quarterly) “at a glance” display of performance and track progress.
- Establish awards/recognitions for notable progress and continuous improvements in data acquisition accomplishments and results as part of DHS’ Sustainable Awards program.
- Present data in an internal communication and training document to create a sense of ownership of sustainability programs throughout the DHS Components, to encourage strategic, “evidence-based” decisions reflecting favorable life-cycle cost performance and human factors benefits (quantifying the non-quantifiable), and to identify and implement market leverage opportunities.



# **HOMELAND SECURITY ADVISORY COUNCIL**

## **Monetization Recommendations**

# BACKGROUND:



The Sustainability and Efficiency Task Force was charged with responding to the following tasks associated with the Department's monetization strategy:

- Develop criteria for how the Department should gauge and evaluate savings.
- Develop performance measures the Department should implement to realize sustainability and efficiency savings.
- Analyze how the Department does real-time metering and how to improve upon those efforts.

# FINDINGS:



- DHS is a relatively new federal agency comprised of multiple components that joined together with pre-existing procedures, systems and approval processes.
- The Department has considerable challenges to secure the funds necessary to implement Executive Order 13514, due to its decentralized organizational structure and lack of uniform processes. Each one of the major Components receives its appropriations individually from Congress.
- Leadership support from, and alignment of, Components is critical to implementing complex and broad requirements and to creating an internal DHS “Scorecard” to exist alongside the requirements of the Office of Management and Budget’s Scorecard. Department of Defense staffers all mentioned that senior leadership has been the key to their success in meeting their sustainability and energy-reduction targets.
- Based on our research into other federal agencies and best practice examples, financial resources exist (i.e., DOE’s Federal Energy Management Program (FEMP)) to help fund and provide technical support to initiatives and projects.
- Additional financial mechanisms (e.g., Power Purchase Agreements and Energy Savings Performance Contracts) can allow the Department to develop projects requiring more than one year’s funding.

# FINDINGS (CON'T.)



- The US Coast Guard’s facilities team has created the “Center for Excellence for ESPCs” with demonstrated success.
- DHS spent almost \$18 million on direct obligations, Energy Savings Performance Contracts (ESPCs), and Utility Energy Service Contracts (UESCs) in 2010, representing 14.5% of total facility energy costs.
- DHS is securing \$48 million for ESPCs for the period from December 2011 to December 2013.
- The Department of Defense plans to more than triple its annual spending through ESPCs by end of FY ‘13, and plans to award \$465 million worth of ESPCs in FY ‘12 and \$718 million in FY ‘13.
- DHS is making progress in metering all of its buildings that are appropriate to meter in each Component’s inventory. In 2010, 52.1% of appropriate buildings were metered, with 20.9% serviced by advanced meters.
- Within DHS, there are 11,553 Department-owned facilities, 1,984 GSA-leased buildings and 653 non-GSA-leased facilities, totaling approximately 43,000,000 GSF.

# **MONETIZATION RECOMMENDATION #1**



**Develop a unified governance ‘One DHS’ approach to implement Executive Order 13514 and to identify and secure funds to meet DHS’s Department-wide sustainability and efficiency goals.**

- Establish a strategic energy and resource-efficiency “master plan,” to which the Components are accountable, to identify energy efficiency opportunities (e.g., buildings, maintenance upgrades, vehicle fleets) and to maximize energy and greenhouse gas emissions reductions.
- Align all Component teams (e.g., finance, procurement, legal, energy management) behind a consistent set of goals, policies, and processes to implement Executive Order 13514.
- Develop a dashboard that allows the Secretary to track each Component’s implementation and achievement of these goals.

# **MONETIZATION RECOMMENDATION #2**



**Create a list of prioritized energy conservation measures to enable rapid approval of projects, and secure funding to support their implementation.**

- Components should adopt funding targets by type (e.g., Energy Savings Performance Contracts (ESPCs), utility service contracts, Power Purchase Agreements (PPAs), waste commodity rebates).
- Components should demonstrate that all available funding mechanisms were used or considered, and take advantage of existing federal agency funding opportunities, staff support, and training to accelerate reductions in energy intensity of DHS-owned and leased properties ( i.e., greening the fleet). Each Component should set targets each year against all available funding mechanisms.
- If funds are available at year’s end, they should be applied only to the pre-approved list of sustainability and efficiency projects.

# **Monetization Recommendation #3**



## **Install meters in 100% of all appropriate buildings.**

- Determine progress since 2010 in using real-time metering and scheduling of building operations for each Component and DHS-wide.
- Set goals to add real-time metering as part of all systems-level upgrades.
- Recommend dedicated resources to continuously commission the most energy intensive buildings.
- If metering is unavailable, prioritize large buildings with the highest energy demand. Use demonstrated efficient buildings (such as those that have been newly renovated) with similar square footage, use patterns, design, and operations to extrapolate and apply energy reduction opportunities and set energy reduction targets.

# **MONETIZATION RECOMMENDATION #4**



**Create a Components Working Group to share best practices and ideas to rapidly reduce energy use and greenhouse gas emissions.**

- Enlist Component representatives to share case studies and lead “how to” events.
- Invite DOD, DOE and EPA facilities, finance, and administrative leaders to these meetings to share best practice examples.



# **HOMELAND SECURITY ADVISORY COUNCIL**

## **Vehicle Fleet Recommendations**

# BACKGROUND



The Sustainability and Efficiency Task Force was charged to respond to the following task associated with the Department's fleet:

- Conduct an evaluation of the DHS vehicle fleet management program especially as it pertains to law enforcement vehicles.

# FINDINGS



- To date, DHS Components have not met required fleet performance improvements.
- DHS' current fleet is the largest fleet in the U.S. government, with an inventory of 57,000 vehicles. Of these, over 70 percent are classified as law enforcement vehicles, which makes them exempt from compliance with federal sustainability mandates such as EO 13514 and the Energy Independence and Security Act of 2007, Section 141.
- DHS' fleet operations represent approximately 70 percent of the Department's Scope 2 greenhouse gas emissions. As such, fleet composition and management must be an essential part of DHS' greenhouse gas reduction strategy.
- Experience in the public and private sectors demonstrates that compliance with key criteria must be consistently enforced through a single central entity that can provide the appropriate internal control.
- DHS staff, Task Force members, and organizations consulted confirmed that end-users of vehicles and equipment currently tend to obtain what is wanted, not what is needed.

# FINDINGS (CON'T.)



- DHS needs accurate and consistent fleet data for Components to measure progress and to document compliance with efficiency requirements.
- As a result of a review of the Federal Fleet conducted by OMB, GSA recommended that each agency have a Fleet Management Information System (FMIS), as mandated in 1986, capable of identifying, collecting, and analyzing motor vehicle data with regard to all costs, to support internal (e.g., agency property and finance systems) and external reporting requirements, and to provide necessary data to respond to the annual budget process and to support fleet budget requests.
- A major benefit of an FMIS is to determine gallons of fuel used per year, determined by vehicle class (e.g., administrative sedan, SUV).

# FINDINGS (CON'T.)



- Reducing the number of high-petroleum-use vehicles such as SUVs, and increasing use of hybrid-electric and all-electric vehicles, idle reduction strategies, and alternative fuels should reduce petroleum fuel usage. The strategy is to analyze every vehicle purchase to determine the optimal balance between functionality, economy, and environmental impact. This methodology has been effectively used by the City of Portland, Oregon for their fleet management process.
- Ancillary benefits from new technology can be tracked and measured in a Fleet Management Information System. The New York City Police Department has tracked the end-user health benefits from alternative fuel vehicles and idle reduction technology. A reduction in health care costs in direct relation to reduced vehicle carbon emissions can be a measurable performance indicator in a sustainable fleet program.

# FINDINGS (CON'T.)



- Major fleet operators use such technology as well as driver monitoring programs to deliver significant efficiencies resulting in direct monetary benefits including: 1) collision prevention realizing cost reductions up to 80% in property, auto liability, and workers' compensation claims; 2) reduction in fraudulent claims; 3) prevention of fuel waste; and indirect benefits such as preventing collisions, injury and loss of life, protecting the organizational brand by minimizing such collisions that might be broadcast on media, and exemplifying good corporate citizenship by contributing to a safer and more environmentally conscious community.

# **FLEET RECOMMENDATION #1**



**The DHS Mobile Assets Director should be solely responsible for vehicle inventory, classification, management, and approval of all vehicle and equipment acquisition, replacement, and disposal requests prior to action by Components. All exceptions to this process should require approval by the Secretary.**

- All activity should be tracked in the Vehicle Allocation Methodology as required by the May 2011 Presidential Memorandum.
- DHS Components must purchase vehicles that comply with federal sustainability mandates and fleet performance measures (e.g., petroleum use reduction, alternative fuel vehicle increase, vehicle classification, overall vehicle count reduction), appropriations laws, and DHS internal fleet policies.
- Given that law enforcement vehicles make up more than 70% of the DHS fleet, the Secretary should endeavor to either include such vehicles in fuel reduction and alternative fuel usage efforts or, alternately, to more stringently limit the number of vehicles so classified.
- The Mobile Asset Fleet Director and assessment team should conduct site visits to fleet operations to ensure that those responsible for motor vehicles are aware of and in compliance with DHS and federal requirements.

# **FLEET RECOMMENDATION #2**



**Implement a centralized Fleet Management Information System (FMIS) across all Components to identify, collect, and analyze motor vehicle data; consider the use of advanced technologies for fleet efficiency.**

- Motor vehicle data should include all costs incurred (e.g., operation, maintenance, fuel, acquisition, and disposition) *by class of vehicle*.
- Systems should include: (1) a modern fuel management system that uses computer chip technology to authorize fueling, dispense fuel, and accurately track vehicle data; and (2) a driver monitoring program to track and analyze undesirable behavior while promoting safe and efficient driving.
- Introduce idle reduction technologies into the fleet.

# **FLEET RECOMMENDATION #2**

**(concluded)**



**Implement a centralized Fleet Management Information System (FMIS) across all Components to identify, collect and analyze motor vehicle data; consider the use of advanced technologies for fleet efficiency.**

- Collect fuel usage data while the centralized FMIS is being developed to establish baseline key performance indicators.
- Develop an internal Quarterly Progress Report to track quantitative measures.
- Collect data in the Data Warehouse to document the fleet's conformance with sustainability and efficiency goals.
- Consider the use of local government fueling stations for DHS fleet vehicles to decrease fuel costs.

# **FLEET RECOMMENDATION #3**



## **Establish a Driver Monitoring Program**

- Incorporate technology into DHS vehicles, as appropriate, that calculates efficiency and safety factors.



# **HOMELAND SECURITY ADVISORY COUNCIL**

Appendices

## Appendix A

### Status of SETF 2010 Recommendations as determined during the July 2012 SETF deliberations.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Organization and Management-Align staff resource allocation to ensure support for the EO-DHS should provide the staff and systems needed to manage EO compliance, establish accountability measures, and report regularly on sustainability benchmarks.	OSEP doubled their staff by hiring 6 additional people. Component actions: NPPD, one position, FLETC created a sustainability position description and FEMA reorganized their environmental office.
2010-February	SETF	Organization and Management-Work with the General Services Administration (GSA) to develop standardized leasing requirements that incorporate principles of sustainability, with regular, quantifiable status updates to DHS-Sustainability-related issues should be incorporated into lease agreements and occupancy agreements to enable faster dissemination and implementation of the EO and other sustainability initiatives. Due to the amount of leased space the department occupies, even simple programs—such as DHS-wide recycling—currently cannot be implemented because DHS receives little to no feedback on sustainability metrics and quantifiable programs.	GSA modified its standard lease document to include sustainability issues. USCIS incorporated sustainability requirements in their standard request for lease that is sent to GSA to get leased space. Other Components use the USCIS document for including information in their requests.
2010-February	SETF	Organization and Management-Establish a cross-functional team to address sustainability issues-This team should comprise technical experts and representatives from a range of functional areas, including information technology, finance, legal counsel, procurement, human capital, and communications. Collaboration among key leaders will ensure the employee buy-in necessary for the successful implementation of the program. This team should include key GSA members with operational control of DHS buildings.	SSO merged the sustainability council into the Management Council. In addition, Sustainability is one of the agenda items for Management's Integrated Program Review, a quarterly cross-CXO functional work group.
2010-February	SETF	Organization and Management-Include lifecycle costs in budget analysis and decision-making-The DHS budget process must address more than initial capital investment; it should also encompass real lifecycle costs. The current process does not account for significant returns on investments after several years, making it difficult to account for real lifecycle costs over the long-term.	Budget planning documents include requirements to address sustainability and use life-cycle cost analysis in decision-making.
2010-February	SETF	Organization and Management-Implement department-wide sustainability training for all DHS employees-To ensure the highest level of participation, DHS must engage the commitment of all employees, and managers, through proper training and incentives. Sustainability goals also should be incorporated into job descriptions and employee performance reviews. Extensive employee involvement will facilitate employee-driven innovation.	Sustainability awareness training developed and deployed using the DHS and Component on-line training systems.
2010-February	SETF	Organization and Management-Assess the security standards of the Interagency Security Committee (ISC) to reinforce and advance the sustainability interests of the EO and DHS-The interagency security standards provide guidance to ensure appropriate measures to secure federal facilities. Sustainability must be incorporated into security measures whenever possible - not subordinated or treated as a separate program.	Based on meetings with CAO and ISC, the ISC will ensure sustainability is adequately addressed and seek CAO for assistance.
2010-February	SETF	Organization and Management-Stand up a department-wide Environmental Management System (EMS)-DHS must ensure facilities have the ability to gather data and report progress on sustainability metrics, including energy consumption, waste production, and water usage. If DHS cannot accurately account for its consumption, it will not be able to effectively reduce consumption in compliance with the EO. An EMS would serve as a framework to execute a department-wide sustainability program and tracking metrics. As an overarching system, EMS would aggregate and analyze data from many individual program areas such as energy, water, waste management, recycling, and environmentally-preferable purchasing. It also would function as a department-wide records system to monitor, measure and report compliance. DHS will need to work with the GSA to develop and stand up an EMS for the facilities DHS leases from GSA. The plan for developing EMSs should focus first on projects with the highest return on investment.	EMS is not a priority for the Administration. EPA recognition/benefits associated with an EMS have been eliminated. The SSPP serves as the structure for an EMS rather than ISO. Individual and Component facility EMS efforts continued.
2010-February	SETF	Organization and Management-Short Term-Align staff resource allocation to ensure support for the EO. Conduct a review of DHS and component environmental staffing, by office level, to ensure commitment to sustainability by DHS headquarters and components, identify gaps in the existing resources as identified by the EO.	OSEP doubled their staff by hiring 6 additional people. Component actions: NPPD, one position, FLETC created a sustainability position description and FEMA reorganized their environmental office.
2010-February	SETF	Organization and Management-Short Term-Work with GSA to develop standardized leasing requirements that incorporate the elements of sustainability, and provide status updates on metrics to DHS.	All completed except metrics from GSA which cannot be provided. GSA modified its standard lease document to include sustainability issues. USCIS incorporated sustainability requirements in their standard request for lease that is sent to GSA to get leased space. Other Components use the USCIS document for including information in their requests.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Organization and Management-Short Term-Establish a cross-functional team to address sustainability issues.	SSO merged the sustainability council into the Management Council. In addition, Sustainability is one of the agenda items for Management's Integrated Program Review, a quarterly cross-CXO functional work group.
2010-February	SETF	Organization and Management-Short Term-Assess the security standards of the Interagency Security Committee to reinforce and advance the sustainability interests of the EO and DHS.	Based on meetings with CAO and ISC, the ISC will ensure sustainability is adequately addressed and seek CAO for assistance.
2010-February	SETF	Organization and Management-Short Term-Standardize component environmental and energy office functions across the department, where possible.	Components maintain Operational Sustainability Performance Plans that feed into the Department's plan.
2010-February	SETF	Organization and Management-Long Term-Include lifecycle costs in the budget analysis and budget decision-making.	The federal budget structure still leans towards first cost. Efforts continue to use life-cycle cost analysis in decision making.
2010-February	SETF	Organization and Management-Long Term-Put in place regional energy managers focused on energy efficiency who can work with multiple components in their respective regions.	Long term issue
2010-February	SETF	Systems and Methods-Short Term-Stand up an enterprise-wide Environmental Management System (EMS). This system would be the overarching —sustainability  system that compiles data from individual program areas. Department-wide records would be used to monitor, measure, and report compliance with requirements. Dedicate resources to establish a system to track the status of all facility projects, and ensure that Energy Independence and Security Act (EISA) and other sustainable building requirements are met. Establish a comprehensive policy for centralized energy and water data collection through an Energy Management System across DHS to understand and track energy performance and to align operations. Centralize the processing of utility invoices and data collection to eliminate unnecessary penalties for late payments. Require source-of-energy performance information and billing information from all DHS facilities. Develop a plan for performance assessment and measurement which includes the assessment of the effectiveness and efficiency of initiatives, and which includes a plan for long-term monitoring, verification of savings, and benchmarking.	EMS is not a priority for the Administration. EPA recognition/benefits associated with an EMS have been eliminated. The SSPP serves as the structure for an EMS rather than ISO. Individual and Component facility EMS efforts continued.
2010-February	SETF	Systems and Methods-Short Term-Work with the Office of Management and Budget (OMB) and Congress to adjust the federal budgeting process to remove barriers and create incentives to investing in efficiency and sustainability improvements.	Program managers maintain relationships with OMB representatives to tackle those barriers that can reasonably be expected to overcome.
2010-February	SETF	Systems and Methods-Short Term-Establish and implement a department-wide plan for the following energy savings ideas: incorporating power management strategies on DHS networks; making double-sided printing the standard format for computers, printers, and copiers; purchasing Electronic Product Environmental Assessment Tool products; and reporting on the annual performance of the above requirements.	The Strategic Sustainability Performance Plan is the Department-wide plan and provides the annual results. Eligible computer power management methods fully implemented and printers reset for double sided-printing.
2010-February	SETF	Systems and Methods-Short Term-Procure software tools that calculate GHG emissions from energy, fuel, petroleum, chemical use, and other sources.	CAO is developing the data warehouse.
2010-February	SETF	Systems and Methods-Short Term-Establish DHS standards for greening travel and meetings.	Policy issued to justify official travel and maximize alternative methods. Department working to improve bandwidth issues that will make teleconferencing more readily available.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Systems and Methods-Short Term-Set mandatory targets for energy savings from retrofits. Work with performance contractors and Energy Service Companies (ESCOs) to establish federal retrofit performance rates to determine final department-wide percentage reduction.	Each new initiative establishes specific targets.
2010-February	SETF	Employee Outreach and Training-Short Term-Implement department-wide sustainability training for all DHS employees.	Sustainability awareness training deployed. Electronic stewardship, GHG reduction, green purchasing and water conservation modules under development.
2010-February	SETF	Employee Outreach and Training-Short Term-Engage all DHS employees to work toward DHS sustainability goals.	Online training, awards program, newsletter articles and USM employee engagement plan are in place to assist in reaching employees.
2010-February	SETF	Employee Outreach and Training-Short Term-Empower employees to solve tough sustainability challenges, and allow their solutions to have an appropriate impact on the resolution of those challenges.	The SSPP and OSPP crosses functional work areas to improve sustainability performance in accordance with the Secretary's policy.
2010-February	SETF	Employee Outreach and Training-Short Term-Establish requirements for Contracting Officers, Contracting Officer Technical Representatives, Program Managers, Project Managers, and other members of the acquisition workforce to complete sustainability training.	USM issued memorandum encouraging all employees to complete sustainability training. CXOs established goals in the SSPP for completing training.
2010-February	SETF	Employee Outreach and Training-Short Term-Instruct all employees engaged in facility maintenance, design, construction, and property management to complete recognized Leadership in Energy and Environment Design (LEED)® training courses. Senior employees within these career fields should be or become LEED Accredited Professionals (LEED AP).	DHS is an active member of the US Green Building Council securing discounts on LEED training. LEED training and individual certification is encouraged in Sustainability and Real Property Manuals.
2010-February	SETF	Employee Outreach and Training-Long-term-Develop mandatory sustainability training courses for DHS and component employees via the DHScovery (on-line) training system.	Sustainability awareness training developed and deployed using the DHS and Component on-line training systems. The training is voluntary, not mandatory.
2010-February	SETF	Employee Outreach and Training-Long-term-Establish a Department-wide awards program for sustainability and provide incentives for winners.	The DHS annual sustainability awards program is in place and has issued awards for two years.
2010-February	SETF	Employee Outreach and Training-Long-term-Include sustainability training in new employee orientation.	Discussions continue on how best to address this issue. The course already takes a full day and individuals are flooded with information.
2010-February	SETF	Energy-Subject all capital and operating projects that affect energy or water usage to lifecycle cost assessments-This approach recognizes the full service life of buildings and building systems by assessing the long-term effects of renovations or operational changes. These assessments would ensure that federal dollars are spent wisely and energy savings are maximized.	For large capital expenditures, project managers must document that life-cycle cost analysis were considered in decision-making on applicable forms. CAO/CIO are developing guidance for incorporating sustainability into IT project planning documents.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Energy-Evaluate opportunities to implement renewable and clean energy options using land and facilities available to DHS-DHS facilities have extensive land and rooftop area that can be used for land-intensive, alternative energy sources like solar, biofuels, geothermal, and wind – as the U.S. Coast Guard has already begun to demonstrate in its sustainability efforts. These installations can often be cost competitive and implemented with minimal upfront capital through lease arrangements on land or facilities already owned by DHS. The department should look for additional opportunities appropriate to local conditions such as availability of local natural resources, local utility rates, and other local factors. DHS should also periodically reevaluate opportunities as the price for these technologies trend downward.	DHS has initiated initial reviews of potential sites for development of on-site renewable energy generation. USCG has used wind and solar. CBP has used solar.
2010-February	SETF	Energy-Short Term- Subject all capital and operating projects that affect energy or water usage to lifecycle cost assessments.	For large capital expenditures, project managers must document that life-cycle cost analysis were considered in decision-making on applicable forms. CAO/CIO are developing guidance for incorporating sustainability into IT project planning documents.
2010-February	SETF	Energy-Short Term- Evaluate opportunities to implement renewable and clean energy opportunities using land and facilities available to DHS.	DHS has initiated initial reviews of potential sites for development of on-site renewable energy generation. USCG has used wind and solar. CBP has used solar.
2010-February	SETF	Energy-Short Term- Retro-commission DHS facilities to ensure they are operating at the highest levels of efficiency currently possible.	This is executed at the field level. Guidance included in the draft Sustainability Manual and Real Property Manual.
2010-February	SETF	Energy-Short Term- Develop a plan for performance assessment and measurement that includes a plan for benchmarking, long-term monitoring, and verification of savings.	SSPP and data warehouse initiative.
2010-February	SETF	Energy-Short Term- Develop a department-wide goal of a specific percentage of energy consumption that must come from renewable energy.	DHS uses the OMB established goals for its goal.
2010-February	SETF	Energy-Long Term- Identify DHS sites for the construction of large-scale renewable energy facilities that will help the department accomplish its mission with a more reliable and secure energy supply.	Initial efforts have begun.
2010-February	SETF	Energy-Long Term-Incorporate shade trees and unpaved surfaces wherever possible around buildings, and in and around parking lots, to decrease temperature of local micro-climates.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Water-Use cost-neutral retrofits involving low-flow and waterless fixtures-Scarcity of regional water supplies is increasingly a security concern. Following disasters, the ability to provide potable water is a mission-critical resiliency issue. Furthermore, water treatment is typically the single largest energy consumer for any municipality. Although water use reduction does not currently provide the same level of cost savings as energy-use reduction, the rising cost of water and sewer service across the country will likely reverse this trend. Cost-neutral retrofits involving low-flow and waterless fixtures can provide the first steps in reducing potable water consumption in DHS facilities. More advanced strategies that provide resilience from drought and disaster—such as reuse of gray water and rainwater for flushing, and on-site wastewater treatment strategies—also are part of a resilient design approach.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Water-Short Term-Use cost-neutral retrofits involving low-flow and waterless fixtures.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Water-Short Term-Where appropriate, develop a plan to incrementally move away from using potable water in toilets, cooling, and irrigation. Implement strategies for capture and storage of rainwater for irrigation, toilet flushing, vehicle washing, laundry and other non-potable uses; Investigate and implement strategies for onsite water reclamation.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Water-Short Term-Develop a plan to use Sustainable Sites guidelines for all DHS sites.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Water-Long Term-Develop a plan to divert rainwater from entering sewage treatment systems through: Dispersed rainwater catchment systems (producing new supplies of water for irrigation, gray-water systems, etc); Green roofs in urban areas where there are limited opportunities for rainwater filtration; Urban forestation in DHS projects (to absorb storm water and reduce urban heat island effects characterized by spikes on peak-load due to increased air conditioning).	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Water-Long Term-Move toward decentralized, low-energy wastewater treatment systems, such as —living-machine   treatment systems that rely on gravity and horticultural engineering.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Transportation and Regional Integrated Planning-Further incentivize employee use of mass transit, bicycling, and walking, while locating facilities to reduce their transportation impacts-Vehicle Miles Traveled (VMT) correlates inversely to residential density; the greater the density, the fewer miles traveled. Neighborhood structure and mix of uses are also contributing factors. To limit individual automobile commuting, the majority of DHS facilities—except those limited by strategic and security concerns, such as border stations—should be located near transit stops in more urban areas of America's low VMT cities.	DHS continues to investigate methods to further incentivize employee use of mass transit, bicycling, and walking. Recently DC region car shuttle service was reduced. OSEP is initiating an effort with USCIS to develop a bicycle commuter website link. Guidance for locating facilities is included in the draft Sustainability and Real Property Manuals.
2010-February	SETF	Transportation and Regional Integrated Planning-Short Term-Further incentivize employee use of mass transit, bicycling and walking, while locating facilities to reduce their transportation impacts.	DHS continues to investigate methods to further incentivize employee use of mass transit, bicycling, and walking. Recently DC region car shuttle service was reduced. OSEP is initiating an effort with USCIS to develop a bicycle commuter website link. Guidance for locating facilities is included in the draft Sustainability and Real Property Manuals.
2010-February	SETF	Transportation and Regional Integrated Planning-Short Term-Investigate the possibility of purchasing low-emission/low-consumption or alternative-fuel vehicles and investigate the possible use of an Energy Savings Performance Contract (ESPC) purchasing tool to purchase these vehicles.	Fleet Acquisition Manual directs that all DHS light- and medium-duty vehicles must be acquired in accordance with EISA 141 and have a GHG emissions score of 7 or higher beginning in FY2011.
2010-February	SETF	Transportation and Regional Integrated Planning-Short Term-Provide secure indoor storage for bicycles, and proper facilities to support commuting via bicycle, where needed, feasible, and cost-effective.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Transportation and Regional Integrated Planning-Short Term-Develop and implement —live where you work   programs, to encourage DHS employees to live in communities and neighborhoods surrounding DHS work sites. Provide incentives for employees to move into surrounding communities from which it is close enough to walk or take public transit to work.	DHS continues to look for methodologies that allow incentives for employees to move into surrounding communities from which it is close enough to walk or take public transit to work.
2010-February	SETF	Transportation and Regional Integrated Planning-Long Term-Work to ensure current and future DHS facilities are located near transit stops in more urban areas of America's low Vehicle Miles Traveled (VMT) cities.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Transportation and Regional Integrated Planning-Long Term-Work to ensure that DHS facilities are an integrated part of the community, where possible and achieving this objective will not inhibit DHS's security mission.	Real security risks continue to exist.
2010-February	SETF	Transportation and Regional Integrated Planning-Long Term-Locate DHS offices and facilities within existing communities and neighborhoods of low VMT cities, where possible and achieving this objective will not inhibit DHS's security mission.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Transportation and Regional Integrated Planning-Long Term-Design DHS buildings in existing communities that would provide porous and activated facades along sidewalks that welcomes pedestrian traffic, where possible and achieving this objective will not inhibit DHS's security mission.	Executed at the field/project level. Guidance is included in the draft Sustainability and Real Property manuals.
2010-February	SETF	Procurement and Waste-Leverage purchasing power to incentivize the innovation of goods and services that align with EO goals-DHS should use its purchasing power to procure goods and services that address key sustainability issues such as GHG emissions, water efficiency, pollution prevention, and high-performance sustainable buildings to encourage manufacturers and corporations to invest in research and innovation, and to increase the production and availability of environmentally preferable goods and services. This can lead to competitive pricing and increase reliance on abundant, renewable, and environmentally-preferable resources.	SSPP addresses issues. The Homeland Security Acquisition Manual includes sustainability purchasing requirements. In the past year, DHS has exceeded OMB sustainable purchases review metrics.
2010-February	SETF	Procurement and Waste-Conduct a waste audit-This would include assessment of waste generation and disposal, waste streams, waste stream composition, current recycling program effectiveness, and waste diversion technologies. All aspects of waste elimination should be reviewed, whether they result from procurement, packaging, solid and food waste, recycling materials, or other sources.	Executed at the field/project level. Guidance is included in the draft Sustainability manual.
2010-February	SETF	Procurement and Waste-Promote the procurement and use of products with low levels of volatile organic compounds (VOCs) and toxic chemicals-A range of VOCs are used in construction, cleaning, and maintenance at DHS. Evidence that VOCs contribute to absenteeism and present an increased risk to public health continues to gain strength.6 DHS can use its operations and purchasing, where possible, to contribute to chemical security by promoting a transition to the purchasing and use of safer chemicals.	SSPP addresses issues. The Homeland Security Acquisition Manual includes sustainability purchasing requirements. In the past year, DHS has exceeded OMB sustainable purchases review metrics.
2010-February	SETF	Procurement and Waste-Short Term-Leverage purchasing power to incentivize the innovation of goods and services that align with EO goals.	SSPP addresses issues. The Homeland Security Acquisition Manual includes sustainability purchasing requirements. In the past year, DHS has exceeded OMB sustainable purchases review metrics.
2010-February	SETF	Procurement and Waste-Short Term-Conduct a waste audit, including assessment of waste generation and disposal; waste streams; waste stream composition; effectiveness of current recycling programs, and implemented waste diversion technologies.	Executed at the field/project level. Guidance is included in the draft Sustainability manual.
2010-February	SETF	Procurement and Waste-Short Term-Promote the procurement and use of products with low levels of VOCs or toxic chemicals.	SSPP addresses issues. The Homeland Security Acquisition Manual includes sustainability purchasing requirements. In the past year, DHS has exceeded OMB sustainable purchases review metrics.
2010-February	SETF	Procurement and Waste-Short Term-Develop a waste management strategic plan including: waste pickup schedule adjustments, recycling programs, source reduction and reuse of products and materials, and innovative waste diversion technologies. U.S. Department of Homeland Security	Executed at the field/project level. Guidance is included in the draft Sustainability manual.

Date	Report	HSAC Recommendations	Notes
2010-February	SETF	Procurement and Waste-Short Term-Determine a baseline for the amount of food waste generated at every DHS facility.	Executed at the field/project level. Guidance is included in the draft Sustainability manual.
2010-February	SETF	Procurement and Waste-Short Term-Sort and compost food waste generated at each facility, where possible.	Executed at the field/project level. Guidance is included in the draft Sustainability manual.
2010-February	SETF	Procurement and Waste-Short Term-Establish a DHS-wide contract for replacement of ink jet and toner cartridges. This contract would include mandatory use of remanufactured ink jet and toner cartridges, easy recycling of spent ink jet and toner cartridges (i.e., mailing envelopes), and credit for recycled ink jet and toner cartridges.	Department-wide contract in place and metrics being reported.
2010-February	SETF	Procurement and Waste-Long Term-Encourage the use of local small businesses to contract with outside product and service suppliers to DHS.	DHS has robust small business program office that consistently exceeds Federal metrics. DHS has routinely been identified as a leader in utilizing small business
2010-February	SETF	Procurement and Waste-Long Term-Encourage carbon footprint minimization through contract provisions with suppliers of all materials, goods, and services.	DHS participates in a the CEQ and GSA work groups that are tackling this issue at the Federal level.
2010-February	SETF	St. Elizabeths-Short Term-Use smart growth principles to set and promote a new standard of sustainability and community connectivity where possible.	Principals have been incorporated.
2010-February	SETF	St. Elizabeths-Short Term-Dramatically reduce the amount of planned on-site parking, and free up a vast site area for more productive uses.	Amount of onsite parking purposely planned to be less than full occupancy forcing different commute strategies to include telework.
2010-February	SETF	St. Elizabeths-Short Term-Work to make buildings that do not need to be gated or closed off for security reasons, open and integrated with the surrounding community.	Due to real security threats the campus will be closed.
2010-February	SETF	St. Elizabeths-Short Term-Adopt the Sustainable Sites Initiative guidelines for rainwater, storm water management, and ecosystem services at St. Elizabeths	USCG facility (under construction) utilizes a green roof that collects stormwater.
2010-February	SETF	St. Elizabeths-Short Term-Design and construct some or all of the buildings to achieve USGBC LEED standards at a minimum Silver level for renovations and Gold for new construction. Achieve LEED Certification for the largest buildings.	Individual facilities are planned to be built to meet silver or gold requirements however actual registration may be accomplished at the campus level.
2010-February	SETF	St. Elizabeths-Long Term-When possible, work with regional, city, and WMATA officials to extend metro transit service to locations close to the main entrance of facilities, ideally by rail, to ensure a feeling of convenience and safety for commuting workers.	DHS continues to work with the various groups.

## **Appendix B**

### **Acronyms and Abbreviations**

<b>CO2</b>	Carbon Dioxide
<b>DHS</b>	U.S. Department of Homeland Security
<b>DOD</b>	U.S. Department of Defense
<b>DOE</b>	U.S. Department of Energy
<b>EO</b>	Executive Order
<b>EPA</b>	U.S. Environmental Protection Agency
<b>ESPC</b>	Energy Service Performance Contract
<b>FEMP</b>	Federal Energy Management Program, DOE
<b>GSA</b>	U.S. General Services Administration
<b>GSF</b>	Gross square feet
<b>HSAC</b>	Homeland Security Advisory Council, DHS
<b>OMB</b>	U.S. Office of Management and Budget
<b>PPA</b>	Power Purchase Agreement
<b>SETF</b>	Sustainability and Efficiency Task Force, HSAC, DHS
<b>SSPP</b>	Strategic Sustainability Performance Plan
<b>UESC</b>	Utility Energy Service Contract

## **Appendix C**

### **Table of Authorities**

#### **Executive Order 13514**

October 5, 2009

Federal Leadership in Environmental, Energy and Economic Performance

#### **Public Law 110-140**

December 19, 2007

Energy Security and Independence Act of 2007

#### **Public Law 99-272**

April 7, 1986

Consolidated Omnibus Budget Reconciliation Act of 1986

Federal Management Regulation Bulletin B-15 for Sections 15301 and 15302

#### **Department of Homeland Security Delegation Number: 00002 (Revision Number: 00)**

May 29, 2012

# Appendix D

## Sustainability and Efficiency Task Force Membership List

**Lydia Thomas**, Trustee, Former President and CEO, Noblis, Inc. (Chair)

**Gail Vittori**, Co-Director, Center for Maximum Potential Building Systems (Vice Chair)

**Aimée Christensen**, Founder and CEO, Christensen Global Strategies

**Mark Frisch**, Principal, Solomon Cordwell Buenz

**Jorge Gonzalez**, Professor of Mechanical Engineering The City College of New York

**Heather Henriksen**, Director, Office for Sustainability, Harvard University

**John Hunt**, Fleet Manager, City of Portland, Oregon

**Anita Kedia**, Business Development Manager, Waste Management Sustainability Services

**Muscoe Martin**, Principal, M2 Architecture

**Jeff Speck**, Principal, Speck & Associates, LLC

**Katarina Tesarova**, Executive Director Global Sustainability, Las Vegas Sands Corp.

**John Viera**, Director, Sustainability and Vehicle Environmental Matters, Ford Motor Company

# **Appendix E**

## **Sustainability and Efficiency Task Force Staff**

**Charles Adams**, Director, Homeland Security Advisory Council, Department of Homeland Security

**Dionne Chisolm**, Fleet Manager, Department of Homeland Security

**Cameron McDougal**, Intern, Homeland Security Advisory Council, Department of Homeland Security

**Angel Padilla**, Intern, Homeland Security Advisory Council, Department of Homeland Security

**Dr. Teresa Pohlman**, LEED AP Director, Occupational Safety & Environmental Programs Office of the Chief Administrative Officer, Department of Homeland Security

**Herbert Pruitt**, Assistant Director for Mobile Assets, Department of Homeland Security

**Becca Sharp**, Executive Director, Homeland Security Advisory Council and Homeland Advisory Committees, Department of Homeland Security

**William Smith**, Director, Homeland Security Advisory Council, Department of Homeland Security

**Steve White**, Energy Program Manager, Department of Homeland Security

**Peter Wixted**, Environmental Program Manager, Department of Homeland Security

# Appendix F

## Statement by HSAC Member Wyoming Governor Matthew H. Mead

I would like to thank the Homeland Security Advisory Council's Sustainability and Efficiency Task Force (SETF) leadership and the members of the SETF for their work on this report.

The recommendations proffered by the SETF present DHS with an opportunity to make the Department more sustainable. I applaud the SETF's good work in encouraging the Department to pursue the acquisition of more high-performing sustainable vehicles. Along with researching the idea of electric cars, which can be cost prohibitive, pose logistical hurdles with respect to mileage range and limits, involve the disposal of batteries, and rely on the electrical grid, I urge the Department to also pursue options like natural gas vehicles.

I submit this statement and my opinion for consideration in addition to the SETF recommendations. As Governor, I have worked with a group of governors and their states (13 in all), which looked at the benefits of transitioning to natural gas vehicle fleets. Natural gas vehicles can tap into the abundant supply of natural gas in the United States, have reduced emissions and can foster energy independence and higher security.

As the Department moves forward with its next steps to increase its sustainability and efficiency, I encourage DHS to follow the model of this Task Force and continue to look at state and local government for findings and best practices, and to use a cost benefit analysis to determine the best approach to a cost effective, sustainable vehicle fleet.