

**Homeland Security Advisory Council**



**Sustainability and Efficiency Task Force  
Recommendations**

**February 2010**

## **Executive Summary**

America's security is closely intertwined with its energy use. A wisely planned sustainability policy that addresses issues of economy, conservation, and future viability will allow the United States to move toward a safer and more secure future by reducing its dependence on foreign energy sources, increasing its dependence on renewable and low-carbon energy sources, and increasing its resilience in the face of disaster.

This report by the Sustainability and Efficiency Task Force (SETF) - an independent advisory board comprised of sustainability experts from around the nation - outlines a strategy through which the Department of Homeland Security (DHS) can adopt sustainable practices, decrease reliance on foreign oil, limit contribution to climate change, and address fiscal concerns in a way that strengthens the DHS mission and enhances the overall security of the nation. To achieve these objectives, the Task Force recommends a number of immediate measures DHS should pursue as first steps on the road to sustainability.

There is no federal agency better positioned to demonstrate the inseparability of sustainability and national security. Equally important, as this report will show, DHS is in a unique position to set the national paradigm for a sustainable, secure, and resilient future.

The recommendations offered in this report demonstrate how sustainable practices can both reduce operating costs and increase national security. Recommendations in this report also provide guidance on how to successfully implement Executive Order 13514 (EO).

This report includes major recommendations for implementing sustainable practices in four broad areas:

- Organization and Management
- Energy and Water
- Transportation and Regional Integrated Planning
- Procurement and Waste
- Opportunities Unique to the DHS Mission

## **Sustainability as a Pillar of National Security**

Uncertain and unsustainable supplies of energy, water, and other resources, and the unpredictability of natural disasters and terrorism, have a major impact on the nation's security.

The nation's security leaders should recognize that their actions should be intimately connected to sustainability.

A well planned sustainability policy that addresses issues of economy, conservation and future viability will allow the nation to move toward a more secure and safe future by reducing its dependence on foreign energy sources and increasing its resilience in the face of disasters.

The Department of Homeland Security (DHS) is in a unique position to set the paradigm for a sustainable, secure, and resilient future by demonstrating how efficiency and sustainability will enhance America's national security.

Once it has implemented a comprehensive set of sustainability measures, DHS will serve as a model not only for other departments and agencies, but for states, localities and the private sector.

## **DHS Leadership Opportunity**

### **Implementation of Executive Order 13514**

On October 5, 2009, President Barack Obama signed Executive Order 13514, *Federal Leadership in Environmental, Energy and Economic Performance*.

This Executive Order (EO) sets sustainability goals for federal agencies and focuses on improving their environmental, energy and economic performance. The EO substantially raises the bar on performance measures and accountability, and underscores the relevance of sustainability and efficiency to DHS's mission. DHS is responsible for integrating the goals set forth in the EO with its mission, and for developing a strategic roadmap for performance and implementation.

### **Contribution to America's Sustainability and Efficiency**

The EO offers DHS the opportunity to develop successful initiatives to strengthen the department's sustainability and efficiency goals, while helping to further secure the nation.

Successful implementation will produce a pragmatic, flexible, and strategic DHS that is the leader in efficiency among the executive agencies, and a model to state, local, private sector, and citizen sustainability efforts.

### **Sustainability and One DHS**

Excellence in sustainability can also enhance the creation of One DHS through adoption of a range of best practices across the organization, across levels and across functions and the integration of sustainability goals with existing DHS program objectives.

## **Recommendations for Implementing Sustainable Practices**

The following recommendations are interdependent and equal in importance. These recommendations have not gone through a governmental budget review process.

### **Organization and Management**

The Task Force/HSAC recognizes the short history of DHS, and appreciates the many challenges the agency faces. However, for DHS to become a leader in sustainability, it must allocate the necessary resources and take the following actions.

- ❖ *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.

- ❖ *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.

- ❖ *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.

- ❖ *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.

- ❖ *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.

- ❖ *Assess the security standards of the Interagency Security Committee 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.

❖ *Stand up a department-wide Environmental Management System (EMS<sup>1</sup>).*

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.

Additionally, DHS must develop and implement the appropriate systems, methods and standards to support the management of a department-wide sustainability program and ensure optimal outreach to DHS employees.

## **Energy and Water**

Climate change has the potential to accelerate and intensify extreme weather events which threaten the nation's stability and security. DHS must implement its own cost-effective strategies to address these concerns by focusing on energy efficiency, conservation, and renewable energy sources; greenhouse gas emissions (GHG) reduction; and resilience and adaptation. This includes but is not limited to: transitioning to high-performance buildings; using all resources more efficiently; and incorporating resiliency measures to potential changes in the natural environment into mission plans. These strategies can save taxpayer dollars, safeguard public health and the environment, and create new domestic jobs.

### 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.

❖ *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

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<sup>1</sup> U.S. Army Environmental Command. "Sustainability: Environmental Management System (EMS)," U.S. Army, Department of Defense, <http://aec.army.mil/usaec/sustainability/ems00.html> (accessed Dec. 9, 2009).

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.

## Water

- ❖ *Use cost-neutral retrofits involving low-flow and waterless fixtures.*

Scarcity of regional water supplies is increasingly a security concern.<sup>2</sup> 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<sup>3</sup> 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.

## **Transportation and Regional Integrated Planning**

For most Americans, the single greatest daily contribution to greenhouse gas emissions occurs not at work, but while driving to and from work<sup>4</sup>. Balancing transportation requirements with the need to bolster energy efficiency and reduce greenhouse gas emissions is one of the major challenges to sustainability. A viable strategy must include more efficient means of transportation and increase access to mass transit, including ways to incentivize its use.

- ❖ *Further incentivize employee use of mass transit, bicycling, and walking, while locating facilities to reduce their transportation impacts.*

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<sup>2</sup> Reed, R. Major USAF. "Dehydrated National Security: Water Scarcity, The Emerging Threat of the 21<sup>st</sup> Century." Graduate diss., School of Advance Air and Space Studies, Air University, Maxwell Air Force Base, Alabama, 2004.

<sup>3</sup> Frost and Sullivan, "Rising Cost of Making Water Safe - A Domino Effect," Frost and Sullivan, <http://www.frost.com/prod/servlet/market-insight-top.pag?docid=95420739&ctxixpLink=FcmCtx1&ctxixpLabel=FcmCtx2> (accessed December 4, 2009).

<sup>4</sup> Scott, Beverly. "Testimony Of Dr. Beverly Scott, General Manager and CEO Metropolitan Atlanta Rapid Transit Authority and Chair, American Public Transportation Association to the Subcommittee on Oversight and the Subcommittee on Select Revenue Measures of the House Committee on Ways and Means Hearing on Surface Transportation Investment Needs . Washington, D.C., <http://www.apta.com/gap/testimony/2009/Pages/testimony090625.aspx>. (accessed Dec. 4, 2009).

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.

## **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<sup>5</sup>.

- ❖ *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.

- ❖ *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.<sup>6</sup> 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.

## **Opportunities Unique to the DHS Mission**

Certain aspects of the DHS mission present unique opportunities for promoting sustainability and require distinct solutions. The Task Force recommends that DHS share its processes and results

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<sup>5</sup> Resource Conservation Alliance & Government Purchasing Project, “Government Purchasing,” Resource Conservation Alliance & Government Purchasing Project, <http://www.gpp.org/gpp.pdf> (accessed Dec. 4, 2009).

<sup>6</sup> Indoor Air Quality Scientific Findings Resources Bank. “Impacts of Indoor Environments on Human Performance and Productivity,” Lawrence Berkeley National Laboratory, <http://www.iaqscience.lbl.gov/performance-summary.html> (accessed Dec. 4, 2009).



with other executive agencies to further establish its leadership credentials and promote compliance with the EO across the federal government.

Some opportunities unique to DHS are:

### **St. Elizabeths**

The future site of DHS headquarters in Washington, D.C., the St. Elizabeths campus provides a unique opportunity for DHS, in partnership with GSA, to showcase its comprehensive approach to sustainability and efficiency, to test the intersection between security and sustainability, to expand its interaction with surround communities, and to act as a catalyst for high-performance building innovation for other federal agencies.

Construction: DHS, as the tenant, should drive sustainability requirements, and highlight the renovation and adaptive reuse of the historical structures at St. Elizabeths as it reinforces a design ethic grounded on resiliency, and underscores the compatibility between security and historic preservation. This would involve reviving *original* sustainable design features such as natural ventilation and daylighting, as well as incorporating *new* strategies and technologies to allow St. Elizabeths to become a leading example of high-performance design. This should include seeking LEED certification for some or all of the buildings and a utilizing Sustainable Sites Initiative rating system for site development.

The St. Elizabeths campus can also demonstrate the use of smart building automation systems and a smart grid. This responsive, resilient systems approach will lead to more cost-effective operations, and encourage innovation focusing on the interrelatedness of security and building management systems.

Community: DHS also should ensure that St. Elizabeths reinforces community connectivity by using smart growth principles that improve pedestrian and transit access for workers (as outlined in the EO) and discourage solo-driver commuting. St. Elizabeths can help promote a new standard of sustainability and community connectivity for all DHS entities.

### **Law Enforcement**

DHS, which encompasses the largest federal law enforcement workforce, can demonstrate that sustainable law enforcement is possible without compromising security or mission.

DHS's law enforcement components—Customs and Border Protection, Immigration and Customs Enforcement, the Transportation Security Administration, the Coast Guard, and the Secret Service—can lead the country in adapting sustainable practices, from using sustainable fueled vehicles (as Secretary Napolitano's Efficiency Review calls for) to utilizing renewable energy sources. DHS can also align with state, local, and tribal law enforcement agencies to facilitate the exchange of sustainability practices, and provide a forum for demonstrating credible solutions to enable their adoption.

## **Public Engagement**

Several DHS components have the opportunity to capitalize on their daily interaction with the public and develop strategies to benefit the department's own operations by publicizing, when possible and cost-effective, sustainability efforts to those who they serve. Border crossings and ports of entry, for example, offer multiple opportunities to spread the sustainability message to the many millions of people who pass through U.S. borders each year. Transportation Security Agency (TSA) security checkpoints, which provide interaction with large numbers of the general public, offer additional opportunities for educational outreach through something as simple as having recycling bins near airport security checkpoints.

## **Tactics and Implementation**

In addition to these strategic objectives and broad recommendations, the SETF has outlined several dozen tactical recommendations which will elevate DHS as a leader in sustainability; enhance DHS's operational capabilities by decreasing spending on electricity, water, fuel and waste removal; and increase DHS's resiliency by creating a safety net of renewable energy. These recommendations are included in Appendix A of this report. They have been further grouped into short-term and long-term recommendations. Short-term recommendations are those the SETF believes can and should be implemented within approximately a year. The SETF believes that by enacting these recommendations, DHS will increase its sustainability and reduce its carbon footprint, but also significantly reduce operating costs. However, these recommendations have not gone through a governmental budget review process.

The discussion of specific individual tactical recommendations must continue. These tactical recommendations are designed to focus efforts on fundamental concepts and practices which, when implemented will put DHS on a path to achieving the goals laid out in the EO and the objectives described in this report.

## **Appendix A**

### **Specific Recommendations**

#### **Organization and Management**

##### *Short Term*

1. 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.
2. Work with GSA to develop standardized leasing requirements that incorporate the elements of sustainability, and provide status updates on metrics to DHS.
3. Establish a cross-functional team to address sustainability issues.
4. Assess the security standards of the Interagency Security Committee to reinforce and advance the sustainability interests of the EO and DHS.
5. Standardize component environmental and energy office functions across the department, where possible.

##### *Long Term*

6. Include lifecycle costs in the budget analysis and budget decision-making.
7. Put in place regional energy managers focused on energy efficiency who can work with multiple components in their respective regions.

#### **Systems and Methods**

##### *Short Term*

8. 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.

9. 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.
10. 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.
11. Procure software tools that calculate GHG emissions from energy, fuel, petroleum, chemical use, and other sources<sup>7</sup>.
12. Establish DHS standards for greening travel and meetings.
13. 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<sup>8</sup>.

### **Employee Outreach and Training**

#### *Short Term*

14. Implement department-wide sustainability training for all DHS employees.
15. Engage all DHS employees to work toward DHS sustainability goals.
16. Empower employees to solve tough sustainability challenges, and allow their solutions to have an appropriate impact on the resolution of those challenges.
17. Establish requirements for Contracting Officers, Contracting Officer Technical Representatives, Program Managers, Project Managers, and other members of the acquisition workforce to complete sustainability training.
18. Instruct all employees engaged in facility maintenance, design, construction, and property management to complete recognized Leadership in Energy and Environment Design (LEED)<sup>®</sup> training courses. Senior employees within these career fields should be or become LEED Accredited Professionals (LEED AP)<sup>9</sup>.

#### *Long Term*

19. Develop mandatory sustainability training courses for DHS and component employees via the DHScovery (on-line) training system.
20. Establish a Department-wide awards program for sustainability and provide incentives for winners.
21. Include sustainability training in new employee orientation.

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<sup>7</sup> Climate Change Program. "Calculating Greenhouse Gas Emissions," New Hampshire Department of Environmental Services, <http://des.nh.gov/organization/divisions/air/tsb/tps/climate/calculate.htm> (accessed Dec. 4, 2009).

<sup>8</sup> US DOE Federal Energy Management. "Emerging Technologies for Energy Savings Performance Contracting in the Federal Sector Program." Department of Energy, [http://www1.eere.energy.gov/femp/pdfs/emerging\\_technologies\\_ase\\_report.pdf](http://www1.eere.energy.gov/femp/pdfs/emerging_technologies_ase_report.pdf) (accessed Dec. 4, 2009).

<sup>9</sup> Professional Accreditation. "LEED Professional Accreditation," U.S. Green Building Council, <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1815>(accessed Dec. 4, 2009).

## **Energy and Water**

### **Energy**

#### *Short Term*

22. Subject all capital and operating projects that affect energy or water usage to lifecycle cost assessments.
23. Evaluate opportunities to implement renewable and clean energy opportunities using land and facilities available to DHS.
24. Retro-commission DHS facilities to ensure they are operating at the highest levels of efficiency currently possible.
25. Develop a plan for performance assessment and measurement that includes a plan for benchmarking, long-term monitoring, and verification of savings.
26. Develop a department-wide goal of a specific percentage of energy consumption that must come from renewable energy.

#### *Long Term*

27. 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<sup>10</sup>.
28. Incorporate shade trees and unpaved surfaces wherever possible around buildings, and in and around parking lots, to decrease temperature of local micro-climates<sup>11</sup>.

### **Water**

#### *Short Term*

29. Use cost-neutral retrofits involving low-flow and waterless fixtures<sup>12</sup>.
30. 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.
31. Develop a plan to use Sustainable Sites guidelines for all DHS sites.

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<sup>10</sup> Doris, Elizabeth, Joyce McLaren, Victoria Healey, and Stephen Hockett. "State of the States 2009: Renewable Energy Development and the Role of Policy," National Renewable Energy Laboratory, <http://www.nrel.gov/docs/fy10osti/46667.pdf> (accessed Dec. 4, 2009).

<sup>11</sup> United Facilities Criteria. "Landscape Architecture" Department of Defense, [http://www.wbdg.org/ccb/DOD/UFC/ufc\\_3\\_201\\_02.pdf](http://www.wbdg.org/ccb/DOD/UFC/ufc_3_201_02.pdf) (accessed Dec. 4, 2009).

<sup>12</sup> Cohen, Ronnie, Kristina Ortez and Crossley Pinkstaff. "Increasing Water Efficiency in California's Commercial, Industrial, and Institutional (CII) Sector." Natural Resources Defense Council (NRDC) Issue Paper. May 2009.

*Long Term*

32. 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).
33. Move toward decentralized, low-energy wastewater treatment systems, such as “living-machine” treatment systems that rely on gravity and horticultural engineering.

**Transportation and Regional Integrated Planning**

*Short Term*

34. Further incentivize employee use of mass transit, bicycling and walking, while locating facilities to reduce their transportation impacts.
35. 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.
36. Provide secure indoor storage for bicycles, and proper facilities to support commuting via bicycle, where needed, feasible, and cost-effective.
37. 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.

*Long Term*

38. 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.
39. 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.
40. 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.
41. 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.

## **Procurement and Waste**

### *Short Term*

42. Leverage purchasing power to incentivize the innovation of goods and services that align with EO goals.
43. 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.
44. Promote the procurement and use of products with low levels of VOCs or toxic chemicals.
45. 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.
46. Determine a baseline for the amount of food waste generated at every DHS facility.
47. Sort and compost food waste generated at each facility, where possible.
48. 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.

### *Long Term*

49. Encourage the use of local small businesses to contract with outside product and service suppliers to DHS.
50. Encourage carbon footprint minimization through contract provisions with suppliers of all materials, goods, and services.

## **St. Elizabeths**

### *Short Term*

51. Use smart growth principles to set and promote a new standard of sustainability and community connectivity<sup>13</sup> where possible.
52. Dramatically reduce the amount of planned on-site parking, and free up a vast site area for more productive uses<sup>14</sup>.
53. Work to make buildings that do not need to be gated or closed off for security reasons, open and integrated with the surrounding community.
54. Adopt the Sustainable Sites Initiative guidelines for rainwater, storm water management, and ecosystem services at St. Elizabeths<sup>15</sup>.

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<sup>13</sup> Smart Growth Online. "Principles of Smart Growth," The Smart Growth Network, <http://www.smartgrowth.org/about/principles/default.asp?res=1024> (accessed Dec. 4, 2009).

<sup>14</sup> Carl Walker. "Parking Structure Cost Outlook for 2009," Industry Insights. 1<sup>st</sup> Quarter 2009. <http://www.carlwalker.com/sites/default/files/pdfnews/1st%20quarter%20newsletter%20FINAL%204-up.pdf>.

<sup>15</sup> The Sustainable Sites Initiative. "About Us," The Sustainable Sites Initiative, <http://www.sustainablesites.org> (accessed Dec. 4, 2009).

55. 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.

*Long Term*

56. 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.





## **Sustainability and Efficiency Task Force Membership List**

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