

2022 Department of Homeland Security Sustainability Plan



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1. DHS Sustainability Plan Summary

The Department of Homeland Security (Department or DHS) is committed to reducing emissions and increasing resilience in order to meet the challenges of a changing climate while continuing to achieve mission requirements. Development of a Sustainability Plan will allow the Department to create a DHS priority actions roadmap toward Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*,¹ goals and showcase our achievements to date. DHS's responsibilities toward sustainability are twofold: (1) enhance resilience and adaptation to climate-related disruptions; and (2) increase environmental stewardship to mitigate and reduce the impact of climate change. DHS is an environmental leader in the Federal Government and established ambitious goals to decrease greenhouse gas (GHG) emissions and increase Department-wide efforts by expanding its inventory of sustainable buildings, increasing energy efficiency, committing to net zero-emission vehicle transition, and conserving water.

2. Priority Actions Towards Goals

A. 100% Carbon Pollution-Free Electricity

The Department expects to achieve 40 percent carbon pollution-free electricity (CFE) in Fiscal Year (FY) 2022. Current strategies are being devised to meet the existing carbon pollution-free energy requirements of EO 14057 to increase CFE to 100 percent by 2030 with up to 50 percent on a 24/7 basis. Priority actions in FY 2022 include the following:

- Quantified emissions from purchased electricity by Emissions and Generation Resource Integrated Database (e-GRID) region to prioritize locations for CFE purchase and on-site installation.
- Prioritized locations for CFE purchases based on 1) emissions / kilowatt-hours (kWh); 2) timing for expiration and renegotiation of existing electricity contracts; and 3) CFE offerings from the local utility.
- Began identifying priority sites for on-site CFE installation, to be completed by end of calendar year 2022.

B. 100% Zero-Emission Vehicle Fleet

The DHS Office of the Chief Readiness Support Officer (OCRSO) fleet program partnered with the Department of Energy (DOE) National Renewable Energy Laboratory (NREL) and the General Services Administration (GSA) to develop short and long-term plans to implement fleet electrification across the Department. This initiative is dependent upon DHS electric vehicle (EV) charging infrastructure capabilities, access to other federal agencies and commercial charging stations and installing electric vehicle supply equipment (EVSE) at DHS-owned, operated, and managed facilities.

- Launched a Fleet Electrification Program Management Office (FE PMO) to intensify momentum and ensure that implementation of fleet electrification is properly coordinated across the Department.
- Established Fleet Electrification Law Enforcement Working Group to ensure that EVs can meet the harsh demands of the law enforcement mission

¹ Executive Order 14057: [FACT SHEET: President Biden Signs Executive Order Catalyzing America's Clean Energy Economy Through Federal Sustainability | The White House](#)

- Procured, upfit, and delivered to the Federal Protective Service (FPS) the first-ever federal government law enforcement (LE) battery electric vehicle, a Ford Mustang Mach-E.
- FPS developed and will implement a three-part test plan for the Mach-E including performance benchmarking, operational assessment, and cyber security. Testing is scheduled to begin in 2022.
- Developed a cost model planning tool for long-term EV/EVSE acquisition strategy.

C. Net-Zero Emissions Buildings, Campuses, and Installations

i. Design and Construction for Net-Zero Emissions

DHS strives to meet federal goals for constructing net-zero buildings by facilitating collaboration between real property, sustainability, and energy programs so that the net-zero emission approach becomes a part of regular business processes and reporting across the agency. All new construction and significant renovation implement practices compliant with the 2020 Guiding Principles for Sustainable Federal Buildings. DHS policy also requires using sustainable design principles when direct leasing or leasing through the GSA.

- DHS will participate in the Federal Energy Management Program (FEMP) Smart Building Accelerator to advance two facilities towards Net-zero goals.
- DHS holds monthly Energy and Sustainability Management Committee (ESMC) meetings with subject matter experts from across the Department. ESMC is a leadership committee focused on developing and executing strategy across sustainability and energy efficiency programs.
- The DHS Science and Technology Directorate (S&T) strives to minimize energy footprint through efficient design. S&T buildings under construction in FY 2022 will meet Leadership in Energy and Environmental Design (LEED) Gold Standards.
- The Federal Emergency Management Agency (FEMA) National Emergency Training Center (NETC) is on track to be net zero by 2025.
- The United States Secret Service (USSS) canine training building received LEED certification and Guiding Principles Compliance.

ii. Increasing Energy Efficiency

DHS energy use intensity continues to decrease from baseline consumption. To ensure DHS operates energy-efficient buildings, the Department conducts recommissioning, and facility energy audits on a four-year cycle to continually identify energy conservation measures. Energy conservation is achieved through best management practices, budgeted projects, and third party financed performance contracts.

- DHS anticipates nearly 22 billion British Thermal Units (BTU) of energy savings from agency obligations toward energy efficiency improvements made in FY 2021.
- DHS anticipates more than 34 billion BTU of energy savings from energy savings performance contracts (ESPCs) awarded in FY 2021.
- DHS leadership recognizes that renewable energy, resilience, and energy efficiency projects should be a priority across the agency.

iii. Increasing Water Efficiency

DHS water use intensity continues to decrease from baseline consumption. To ensure water efficiency continues to improve, DHS conducts facility energy and water audits on a four-year cycle to identify opportunities for water conservation. Water efficiency measures are implemented through process changes, budgeted projects, and third party financed performance contracts.

- DHS reduced water consumption by 34 percent from its 2007 baseline in FY 2021.
- DHS plans to study and implement off-grid atmospheric water generating units that capture atmospheric water to provide potable water at water-scarce sites with FY 2023 funds.

D. Reducing Waste and Pollution

DHS's goal is to achieve a waste diversion rate of at least 50 percent and maintain cost effective waste prevention and recycling programs. The Department is updating its policy to match new goals and objectives. Accounting for Recycling Funds, which formalizes the tracking and reporting of recycling funds received and the accounting of those expenditures, is done in a manner consistent with DHS policy and applicable federal statutes. In addition to these actions, DHS continues to actively reduce waste and pollution through several measures.

- Incorporation and application of construction and demolition (C&D) waste diversion clauses.
- Waste and recycling outreach efforts increase awareness through events throughout the year.
- Compliance with Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (42 U.S.C 11001-11023).

E. Sustainable Procurement

Energy Efficiency is a key element of the Secretary's stated priorities. DHS seeks to lead large federal government agencies as an exemplar for using contract vehicles to drive responsible corporate behavior in this area. Key actions across priority objectives:

- Establish mechanisms to drive corporate citizenship behavior through contracts and oversight processes.
- Equip the workforce with knowledge and tools to effectively implement.
- Educate industry on the desired corporate citizenship objectives and behavior.
- Define relevant and meaningful corporate citizenship goals and measure progress.

The Department issued guidance to contracting staff to support compliance with the Federal Acquisition Regulation (FAR) sustainable acquisition requirements and sustainable acquisition FPDS-NG coding guidance.

- DHS holds quarterly Sustainability Acquisitions Work Group (SAWG) meetings where Component subject matter experts from sustainability and procurement offices participate in developing and implementing guidance that meets their mission requirements.
- DHS Strategic Sourcing Contract Vehicles and Government-wide acquisition vehicles include sustainable acquisition criteria.

- The Department requires all applicable electronics purchased to be Electronic Product Environmental Assessment Tool (EPEAT) compliant per FAR 23 requirements.
- DHS has continued its robust program in Electronic Stewardship. The Federal Strategic Sourcing Initiative Contracts, First Source II, and Eagle III were utilized to purchase 56,967 EPEAT registered units in FY 2021.

F. Climate and Sustainability Focused Federal Workforce

DHS will increase climate and sustainability literacy among DHS employees, stakeholders, and volunteers using training programs and other educational opportunities. The Department is committed to creating and growing a climate-literate workforce that understands the principles of climate change, can assess scientifically credible climate information, and can make informed decisions about climate change impacts on mission activities. In addition, the agency is fostering a culture of knowledge and practice for climate adaptation and sustainability.

- Developing an enterprise-wide climate literacy strategy.
- Developed the first ever DHS Climate Change Professionals Program, which is part of the Secretary's Honors Program.
- Created a DHS dedicated website for climate change [DHS Actions: Climate Change | Homeland Security](#).
- Developing a common picture of understanding from scientific agencies such as the National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA), and the U.S. Global Change Research Program.

G. Incorporating Environmental Justice

DHS OCRSO and the Office for Civil Rights and Civil Liberties (CRCL) co-lead implementation of the Department's Environmental Justice Strategy and the DHS Environmental Justice Work Group. DHS is committed to the implementation of EOs 12898² and 14008³ as well as the Justice40 Initiative⁴. CRCL also leads the Department's effort to advance equity consistent with EO 13985, while OCRSO provides policy and oversight for the Department's real property portfolio and sustainability and environmental programs.

- Expand Department-wide awareness of environmental justice considerations that might result from its programs, policies, and activities.
- Further the integration of environmental justice principles into DHS lines of business.
- Strengthen outreach to communities and stakeholders through public engagement.
- Increase collaboration and knowledge-sharing with interagency partners to efficiently focus Department resources and technical assistance.
- Integrate environmental justice principles into Departmental climate change initiatives.

² EO 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

³ EO14008 *Tackling Climate Crisis Home Abroad.pdf*

⁴ *Justice40 Initiative | The White House*

H. Accelerating Progress through Partnerships

DHS has continued to grow its partnerships within the federal government, to include work with the Department of Defense (DOD), NOAA, NASA, and DOE. For example, DHS formed partnerships with DOE laboratories such as Sandia National Laboratories (SNL), Idaho National Labs (INL), and NREL to integrate climate strategy, resilience, and sustainability into decision making. Additionally, DHS representatives serve on the National Climate Task Force's Resilience Work Groups to enhance cross-agency collaboration and ensure a whole-of-government approach.

- DHS is participating in DOE FEMP's Smart Building Accelerator to help develop tools that can be used across the federal government for creating grid-integrated efficient buildings.
- DHS is a core member of the performance contracting interagency working group, a forum to share best practices, expand performance contracting, and accelerate the implementation of energy efficiency and renewable energy projects.
- DHS has an active Memorandum of Understanding (MOU) with DOE FEMP to address energy, sustainability, resilience, and adaptation. DOE FEMP provided two Energy Savings Performance Contracts training webinars to the DHS workforce in recent months.

3. Progress Examples

100% CFE and Accelerating through Partnerships: U.S. Immigration and Customs Enforcement (ICE) and U.S. Customs and Border Protection (CBP) and leveraged grants from the DOE Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) program to address climate resilience and mission-oriented technologies. ICE and CBP's partnership is considered the first dual-agency ESPC with the interagency agreement. The partnership's outcome is a microgrid system designed to withstand hurricane wind speed and achieve net-zero on St. Thomas, U.S. Virgin Islands.

100% Zero-Emission Vehicle Fleet and Accelerating Progress through Partnerships: DHS initiated and co-led the government effort to exempt certain electric vehicle charging stations from review under Section 106 of the National Historic Preservation Act with the Advisory Council on Historic Preservation, which would allow federal agencies to expedite the review process required for federal undertakings and more quickly implement EVSE infrastructure for the federal fleet.

Net-Zero Emissions Buildings, Campuses, and Installations, Increasing Water Efficiency: U.S. Coast Guard (USCG) Training Center Petaluma supports approximately 3,500 students annually, 350-370 permanent staff, and 500 family housing residents. A large-scale solar photovoltaic (PV) project is estimated to result in annual savings of \$1.2M, 8.7M kWh/year of electricity and over 50 thousand gallons per year of propane.

Net-Zero Emissions Buildings, Campuses, and Installations, Increasing Water Efficiency: In FY 2022, DHS allocated funds for CBP to conduct a feasibility study and implement test bed projects of atmospheric water generation (AWG) units powered by photovoltaics and battery backup. The projects will evaluate multiple CBP locations with water availability or quality

concerns. The project will also investigate the feasibility of using portable AWG for natural disaster response.

Net-Zero Emissions Buildings, Campuses, and Installations, Increasing Water Efficiency: U.S. Citizenship and Immigration Services (USCIS) utilizes best practices to implement sustainable procedures in FY 2021 increased its leased LEED facility inventory by 12.5 percent, reaching an overall 47 percent.

Reducing Waste and Pollution: In 2019, USCG Air Station Cape Cod initiated a waste oil reduction program in the fixed wing aircraft hangar that has reduced waste oil generation by 3,500-4,000 gallons a year and resulted in an annual waste disposal cost savings of \$2,500. The program was so successful, the unit is currently expanding it to the rotary wing aircraft building, anticipating an additional 3,000-gallon reduction in waste oil generation annually. The Transportation Security Administration (TSA) Aerosol Tracker Program has recycled over 62 tons of aerosols, and the Flammable Liquid Drinking Alcohol (Ethanol) Recycling Program (ERP) has recycled close to 400 tons of ethanol and the associated glass bottles.

Reducing Waste and Pollution: The Federal Law Enforcement Training Center (FLETC) is constructing a new and dedicated Recycling Center at their facility in Glynco, GA. The new recycling building will increase the number of recyclables collected and stored.

Climate- and Sustainability-Focused Workforce: DHS started the Climate Change Professionals Program (CCPP) to provide two cohorts of 10-12 individuals with the necessary training and practical experience to successfully ensure that DHS has the resources to comply with EO 14057. The two-year program is a part of the Secretary's Honors Program and provides participants with hands-on opportunities to contribute to new initiatives that can substantially help DHS adapt to climate change and improve resilience. The program is based on three tracks: (1) DHS-specific core development courses; (2) climate change-specific technical courses; and (3) a combination of on-the-job training and assigned practicums. The CCPP will provide DHS with trained personnel who have completed the 2-year program. Training for the first cohort of professionals will commence in mid-July 2022.

Climate- and Sustainability-Focused Workforce: The Cybersecurity and Infrastructure Security Agency (CISA) launched the Think Green, year-long campaign geared toward bringing awareness to environmental initiatives and the CISA Environmental Program. Each month of the campaign is geared towards an environmental topic with June's topic focusing on Climate Resiliency and Disaster Preparedness. This campaign is CISA's approach to inform the workforce of environmental initiatives and to increase knowledge in the various environmental areas.

Incorporating Environmental Justice: CRCL created an Equity Task Force and published the Department's first Equity Action Plan, which identified seven critical programs with the most significant potential for advancing equity in DHS operations and activities, including reviews of DHS programs and activities.

Incorporating Environmental Justice: DHS presented information on environmental compliance and environmental justice during the annual Departmental Tribal Summit to share important information on DHS programs, policies, and activities and potential benefits or disproportionately adverse impacts on communities with environmental justice concerns.